# An Investigation of the Quality of Thai Undergraduate Students' Peer Feedback, Interaction Patterns, and Written Revisions through the Incorporation of Technology

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# การสำรวจคุณภาพของการให้ข้อมูลย้อนกลับจากเพื่อน, รูปแบบปฏิสัมพันธ์ และ การทบทวนงานเขียนผู้เรียนชาวไทยระดับปริญญาตรีผ่านการใช้เทคโนโลยี

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การให้ และ การรับข้อมูลย้อนกลับจากเพื่อนเป็นสิ่งสำคัญในการช่วยพัฒนางานเขียน งานวิจัยนี้มีวัตถุประสงค์เพื่อศึกษารูปแบบปฏิสัมพันธ์ออนไลน์ต่างๆในกิจกรรมการให้ข้อมูลย้อนกลับจากเพื่อน และ การพัฒนางานเขียนของผู้เรียน กลุ่มตัวอย่าง คือ นิสิตระดับชั้นปีที่1 ของจุฬาลงกรณ์มหาวิทยาลัยที่ลงทะเบียนเรียนวิชาภาษาอังกฤษพื้นฐาน II จำนวน 30 คน แบ่งเป็นสามระดับตามความสามารถ โดยใช้เกณฑ์จากคะแนนในการทดสอบวัดความสามารถการใช้ภาษาอังกฤษทางการเขียน กลุ่มตัวอย่างต้องใช้แพลตฟอร์มทางออนไลน์ในการให้ข้อมูลย้อนกลับเพื่อนแบบนิรนาม จำนวน 2 ชิ้นงาน เก็บข้อมูลเชิงคุณภาพและข้อมูลเชิงปริมาณจากการปฏิสัมพันธ์ออนไลน์, ร่างการทบทวนงานเขียน, แบบสำรวจทัศนคติออนไลน์ และ การสัมภาษณ์แบบกึ่งทางการ ผลวิจัยแสดงให้เห็นว่า นิสิตพัฒนางานเขียนของตนได้อย่างมีนัยสำคัญ การเปรียบเทียบระหว่างร่างงานเขียนแสดงให้เห็นว่า มีการทบทวนงานเขียนที่เกิดจากข้อมูลย้อนกลับเพื่อน และ จากนิสิตเองเป็นจำนวนมาก แสดงนัยว่าการให้ข้อมูลย้อนกลับจากเพื่อนแบบออนไลน์มีผลต่อการพัฒนางานเขียนทั้งทางตรงและทางอ้อม ผลวิจัยโดยรวมสนับสนุนแนวคิดด้านการเรียนรู้ผ่านสังคม และ เสนอว่า การสร้างองค์ความรู้ร่วมกันเกิดขึ้นเมื่อมีปฏิสัมพันธ์แบบร่วมมือโดยการแลกเปลี่ยนความคิดความเห็นกัน ท้ายสุดพบว่าผู้เรียนโดยทั่วไปมีเจตคติทางบวกต่อการอบรม และ กิจกรรมการให้ข้อมูลย้อนกลับเพื่อนแบบออนไลน์ จากผลการศึกษาดังกล่าวสรุปได้ว่า การให้ข้อมูลย้อนกลับเพื่อนแบบออนไลน์สามารถเป็นกิจกรรมเสริมในการพัฒนางานเขียนของนิสิตได้อย่างมีประสิทธิภาพในชั้นเรียนภาษาอังกฤษแบบบูรณาการทักษะ



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# # 5787774520 : MAJOR ENGLISH AS AN INTERNATIONAL LANGUAGE
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Giving and receiving feedback is an important facet in developing writing. This study aimed to investigate different online interaction patterns during peer feedback activity and to examine how it could lead to students' writing improvement. The study sample consisted of 30 first-year undergraduate students of Chulalongkorn University who were enrolled in a required foundation English course II. Subjects were classified into three writing proficiency levels using scores from an English writing proficiency test. They were required to use an online platform to provide peer feedback anonymously on two writing assignments. Quantitative and qualitative data were collected from students' online interactions, their written drafts between drafts, an online attitude questionnaire, and semi-structured interviews. The study findings reveal that students improved their writing significantly. The comparison between drafts further demonstrate a substantial number of participants' peer and self-initiated revisions, implying both direct and indirect impact of online peer feedback on students' writing improvement. These findings together support the social learning theory and suggest that the co-construction of knowledge occurs in student dyads who interact collaboratively when exchanging ideas with each other. Finally, students, in general, had a positive attitude toward the intensive training and the online peer feedback activities. Based on the study findings, it could be concluded that online peer feedback could be effectively implemented as a supplement activity to promote students' writing in an English integrated skills course.



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# CHAPTER 1

# INTRODUCTION

## 1.1 Background of the study

In the area of writing, students' lack of autonomy when taking on a passive role of their own learning has remained a critical problem. One possible explanation for this situation stems from the fact that they are deprived of an active learning environment. In an EFL context, the long-existing concept of the learner-centred approach in writing instruction has not been wholeheartedly embraced by Thai English teachers and students due to Thai social hierarchies (Stone, 2017). Having a teacher as the sole authority who provides feedback has been the norm in a typical Thai classroom. However, to be able to improve writing skills, it is necessary that students learn how to be critical in assessing their own written work.

At Chulalongkorn University, an English experiential course is compulsory for all first-year students. In this mixed-proficiency class, students meet three hours per week to develop all foundation English skills. They practice reading, listening, speaking, and writing combining both oral and written communication. In this course, students usually have four reading passages for two units. They practice listening from the clips that are either included in each unit or prepared as supplementary. At the end of their reading and listening, students complete exercises to test their comprehension and select topics related to the reading passage for a group discussion.

In Thailand, students do not use English in their everyday life activities. This directly influences how writing has been taught and learnt in Thai classroom (Chuenchaichon, 2014). To develop students' writing skills in an English experiential

course, they practice two types of essays: a persuasive essay before the midterm examination and a problem-solution essay before the final examination. During this process, students are taught basic structures and useful expressions for each essay type and they come up with their own topics to practice in class.

Among these four English skills, writing is viewed as challenging since it involves a number of cognitive processes and metacognitive activities (Negari, 2011). It not only requires students to write grammatically correct with appropriate words, but also to arrange their thoughts logically in an organised fashion. In an English experiential course, to master all these writing skills under a time constraint of three hours per week is fraught with difficulties for many low proficiency students. As learners are required to develop all English skills, time has not been entirely devoted to practicing their writing. In addition, students are passive in their own learning as they regard writing tasks as complete once submitted. They are often excessively dependent on their teachers as they have the teacher as the only audience of their writing, leading to the lack of audience awareness when having to write for different purposes.

It has been suggested that "one pedagogical practice designed to build up students' academic writing competencies and help student writers become less dependent on the teacher is the use of peer feedback" (Kulsirisawad, 2012, p. 4). That is, instead of simply accepting feedback from their teachers, students gain control of their own writing when having the opportunity to decide whether to incorporate peers' feedback into their work (F. Hyland, 2000). In addition, Berggren (2013) aimed to explore possible benefits of students' giving feedback to peers and found that students could learn from providing peer feedback by adopting a reader perspective and audience awareness. Peer feedback has also been suggested to promote self-assessment and self-regulatory skills among students (K. J. Topping, 2009).

However, incorporating peer feedback in EFL writing classrooms is not a novel concept (Coté, 2014). It has been regarded as a deep approach to learning whereby students can help one another to revise their work (Cheng & Warren, 2005). When comparing peer feedback with teacher feedback, M. Yang, Badger, and Yu (2006) found that although peer feedback had less impact on the extent to which it was incorporated into students' writing, it did support students' autonomy (M. Yang et al., 2006, p. 193). Peer feedback has also been suggested as beneficial in terms of developing critical thinking (Topping, 1998) along with fostering the sense of ownership of the text (Tsui & Ng, 2000) and encouraging students to be independent as self-reliant writers who take charge of their own written work (Rollinson, 2005).

Although peer feedback has been found to be beneficial, implementing it does not come without challenges (Charoenchang, 2013; Nilson, 2003; K. Topping, 1998), particularly in an EFL context. To name but a few, when students have to give comment on peers' written work, they perhaps lack experience and confidence to offer feedback on others' writing. Moreover, in a higher education classroom, Thai students have been regarded as adopting a collectivist culture (Gelb, 2012). This means that they are likely to maintain a good relationship to keep the group in harmony by avoiding comments that may possibly hurt others' feelings and consequently providing only positive feedback that leads to no improvement in their peers' writing (Charoenchang, 2013).



A growing body of research has focused on several aspects of peer feedback. A number of studies have investigated its reliability and validity (Cho, Schunn, & Wilson, 2006; Schunn, Godley, & DeMartino, 2016) and its possible effects on writing quality (Kamimura, 2006; Wakabayashi, 2008). Researchers have also examined the nature of peer feedback and its effects on writing performance (Gielen, Peeters, Dochy, Onghena, & Struyven, 2010; Kamimura, 2006; Nelson & Schunn, 2009). Recently, some studies have centred on the role of feedback-givers and feedback-

receivers with the aim to discover who could better benefit from such an activity (Li, Liu, & Steckelberg, 2010; Lundstrom & Baker, 2009; Sotoudehnama & Pilehvari, 2016).

Although considerable research has been devoted to investigating peer feedback, the contribution of second language (L2) proficiency to peer feedback has been almost under-researched despite the fact that it tends to be an important key to determine peers' ability to give and utilise feedback (Allen & Mills, 2016, p. 1). Much research on peer feedback has yet to address the relationship between students' English proficiency levels and the area of feedback provided.

Allen and Mills (2016) point out that the effectiveness of students' comments is attributable to their proficiency levels. To illustrate, low English proficiency could be one of the main factors that prevents students from providing useful feedback. Accordingly, students are not likely to revise their writing based on peers' comments regarding language elements, as they perhaps do not trust their peer reviewers. This is supported by M. Yang et al. (2006) who explain that students' perception of the low linguistic abilities of their peers could be attributed to the less surface changes made according to peer-initiated revisions (M. Yang et al., 2006, p. 192).

Apart from students' English proficiency levels and their comment areas, previous studies have compared feedback modes such as online versus traditional peer feedback (DiGiovanni & Nagaswami, 2001; J. Liu & Sadler, 2003; Tuzi, 2004). Research has suggested that modes of feedback either online or face-to-face may affect the extent of students' feedback and revisions. J. Liu and Sadler (2003) also found that students in the technology-enhanced group generated more comments, particularly those that were revision-oriented, including the overall number of revisions made as compared to the students in the face-to-face feedback group.

Technology has been continually integrated into writing instruction (K. Hyland & Hyland, 2006; Yu & Lee, 2016a) to facilitate teaching and learning as the limitation

of class time may prevent peer feedback from being effectively implemented (Zhouyuan, 2016). Sung, Chang, Chiou, & Hou (2005) claim that technology may compensate for the constraint of traditional peer feedback. Although the number of studies on technology-enhanced peer feedback has recently been increasing, they have not adequately addressed the issue of students' interactions during the online peer feedback activity, particularly how it leads to the improvement of students' written work. Additionally, the existing studies were mostly conducted in classrooms where writing was the only main skill of focus (Chang, 2012; DiGiovanni & Nagaswami, 2001; J. Liu & Sadler, 2003; Lu & Bol, 2007; Tuzi, 2004), leaving incorporating technology-enhanced peer feedback into an English integrated skills course to be underexplored.

In summary, the current study aimed to address students' collectivist culture in peer feedback tasks. It seeks to explore the patterns of interaction between students of different writing proficiency levels, as well as to address the issue of time constraints in an English integrated skills course. It was anticipated that the findings would shed light onto how learning occurs during online peer feedback and would provide insight into how technology could be utilised effectively in such a Thai classroom context.



## 1.2 Research questions

1. What are the patterns of interaction during peer feedback sessions between student pairs?
2. What effect does the electronic peer feedback have on the outcomes of students' writing?
3. What are the students' attitudes toward the intensive peer feedback training and the electronic peer feedback?

## 1.3 Objectives of the study

1. To examine the patterns of interaction during peer feedback sessions between student pairs

2. To investigate the effect of electronic peer feedback on the outcomes of students' writing

3. To explore students' attitudes toward the intensive peer feedback training and electronic peer feedback

## 1.4 Statement of hypothesis

A prior study has revealed that students are less pressured when providing online feedback (Ho & Savignon, 2007), and online peer feedback has also been found to increase students' participation due to a less threatening environment (Guardado & Shi, 2007). In addition, J. Liu and Sadler (2003) have reported that the technology-enhanced group could generate more comments including those that are revision-oriented and make more revision than those who give comments on their peers' papers. Based on these findings, it was then hypothesised that incorporating technology with peer feedback activity would enhance the extent of students' feedback and revision.



## 1.5 Scope of study

The present study employed descriptive and qualitative research designs as the study aimed to provide "descriptions of phenomena that occur naturally, without the intervention of an experiment or an artificially contrived treatment" (Seliger & Shohamy, 1989, p. 116). Quantitative and qualitative data were collected

from an intact group of 30 first-year Chulalongkorn University students who were enrolled in a required integrated skill course to investigate the effects of trained peer feedback on the outcomes of students' writing using the English writing proficiency test, online peer feedback tasks, online attitude questionnaires, and semi-structured interviews. The variables in this study comprised the independent variable, which was the online peer feedback, and the dependent variable, which was the improvement in students' writing. Data collection took place in the second semester of the academic year 2018. Data were analysed using an English writing assessment rubric, a grid for feedback analysis rubric, a grid for revision analysis rubric, patterns of dyadic interaction categories, and patterns of peer questioning categories. The data analysis methods included both quantitative and qualitative methods as the findings were explained using numbers and a descriptive style. The quantitative method included descriptive statistics, while the qualitative methods included textual analysis and content analysis.



## 1.6 Definition of terms

**Peer feedback**

Peer feedback, also known as peer review and peer response, is defined as "activities in which students work together to provide comments on one another's writing in both written and oral formats through active engagement with each other's progress over multiple drafts" (Hansen & Liu, 2005, p. 1, as cited in Chen, 2016, p. 365). Peer feedback has been applied to ESL/EFL writing classroom as an instructional method with the aim to improve students' writing by enabling them to comment on their peers' draft (Chen, 2016). In this study, peer feedback referred to an activity whereby the students scaffolded one another by reading their peers'

writing and using their L1 to comment via platform with the aim to improve the quality of their written work.

**Revision**

Regarding its complex nature, revision is distinguished between internal (a process that occurs mentally which is more difficult to approach) and external revision (changes that the author has made which can be seen on a text) (Fitzgerald, 1987). In this study, revision was defined as a process in which the writer reread his or her written work with the aim to correct or reduce the gap between the intended text and the actual written text and/or to improve its quality. This process involved changes that occurred throughout the writing activity whether it was to simply correct and edit some words or to add and delete a whole paragraph that might change the meaning of a text or left it intact.



**Technology-enhanced peer feedback**

Providing feedback online has been increasingly common in writing instruction. In an ESL/EFL writing classroom context, the use of technology has been introduced as "a way to promote interaction about writing through peer response groups" (Ware & Warschauer, 2006, p. 109). In this study, technology-enhanced peer response referred to an activity in which students provided comments on one another's writing through online platform called 'Edmodo' (see https://www.edmodo.com/). Students were instructed to prepare themselves for the peer feedback activity Furthermore, in this study, an intensive peer training for online peer feedback referred to an explicit teaching of a peer feedback process within a

limited time before engaging the students in the peer feedback process. The intensive training was aimed to equip the students with the knowledge and skills on how to provide critical feedback and how to employ questioning strategies needed in asking constructive questions. In this activity, students would be guided to focus on specific elements of their peers' writing and to scaffold one another to carry out and eventually complete the tasks.

**Interaction patterns**

The students' interaction during online peer feedback session is defined according to Storch's (2002) patterns of interaction. It is categorised in relation to 'equality' and 'mutuality' during the interaction. The former refers to 'authority over the task or activity,' while the latter involves 'the level of engagement with each other's contribution' (Storch, 2002). The patterns of interaction include 'collaborative,' 'dominant/dominant,' 'dominant/passive,' and 'expert/novice' patterns. In this study, 'expert/passive' pattern was selected and included in the categorisation of interactions.



**Writing quality**

Writing quality refers to students' abilities to write in a clear manner and to follow rule of grammar and sentence construction (Winch & Wells, 1995). It can be defined according to rubric criteria in terms of idea-content development, organisation, voice, sentence fluency, word choice, and conventions (Wolfe, 1993). In this study, the quality of writing referred to correct conventions (grammar), appropriate use of words, and logical content and organization. Writing quality was

assessed using the rating scale adapted from the rubric used in the English experiential course (Appendix A).

## 1.7 Significance of the study

In terms of theoretical significance, the findings of this study would redound to the benefits of learning in a socially constructed environment, taking into consideration the challenges of using peer feedback in a culture that traditionally holds teachers to be the sole authority when feedback comes into play. Moreover, the demand for independent learners justifies the need for more approaches that support independent and autonomous learning. The findings from an investigation into students' patterns of interaction provide an understanding of how students support each other during peer feedback tasks. By investigating how learning occurs through social support such as the peer feedback activity would help enforce our understanding of social constructivism. In relation to practical significance, this study demonstrates how technology such as an online platform could be integrated into feedback tasks as a tool to scaffold students' learning in an English integrated skills course.

# CHAPTER 2

# LITERATURE REVIEW

This study examined students' interaction during their online peer feedback tasks and investigated the effects of the online peer feedback on students' writing improvement. To gain an understanding of the existing research and situate the current study within the body of the relevant literature, this chapter provides an overview of social constructivism theory, computer-mediated peer feedback, training for peer feedback, and related research in the field of writing instruction.

## 2.1 Theoretical framework

This study is in the area of peer feedback; it is framed by the theory of cognitive development, social constructivism. It is also informed by the notion of computer-mediated communication as relevant to the integration of an online platform into peer feedback tasks. This research regards peer feedback as a social activity whereby the students collaboratively construct knowledge through communicating ideas with one another in order to improve their writing.

One prominent explanation of how learning occurs is supported in relation to Piaget's (1953) concept of cognitive development in terms of one's cognitive disequilibrium. This 'cognitive conflict' is regarded as individual's awareness of contradiction between one' own prior knowledge and the new information presented by others (Y.-F. Yang, 2010). That is, between what is known and what is unknown.

Piaget illustrates individual's disequilibrium as a mechanism for learning (Choi, 2002; Damon, 1984; Piaget, 1953; Powell & Kalina, 2009). In other words, disequilibrium occurs when the learners' existing knowledge contradicts with what they encounter through interacting with others (Daniels, 2005). Choi (2002) asserts that confusion and disagreement between individuals are important factors for constructing one's own knowledge. The cognitive conflict is believed to be the key contribution to the intellectual development that leads students to attain new perspective through communicating ideas with one another.

This study believes that one's cognitive conflict is an essential element for knowledge co-construction, which according to Choi (2002), is "a process of building consensus while finding solutions, arriving at convergent conceptual change, and/or constructing socially-shared meaning or understanding among learners" (Choi, 2002, p. 32). McLeod (2009) further indicates that although the focus of Piaget's cognitive development theory is on individual's development rather than on the learning per se, it does provide an implication for the teachers to apply collaborative along with individual activities in order to help the students to learn from each other (McLeod, 2009).



Another perspective of how learning occurs can be described through the lens of social constructivism (SC). According to Vygotsky, knowledge arises from social interaction. This theory focuses on cognitive development occurring within individual's zone of proximal development (ZPD) – "the distance between two developmental levels, which are the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978a, p. 33).

In consideration of how knowledge is constructed through social interaction, Vygotsky (1994) further indicates that “what is in the ZPD today will be the actual developmental level tomorrow” (Vygotsky, 1994, p. 54). This theory is based upon the grounds that knowledge is co-constructed as students are supported by more competent peers. From this point of view, with the support from a more proficient peer, the less competent student can become ‘independently proficient at what was initially a jointly-accomplished task’ (Chaiklin, 2003, p. 2). That is, the students have potential to independently accomplish the tasks that were initially done with the help from adult or more proficient person.

It has been suggested that the learners should benefit from the social support, regardless of the proficiency level of the supporter. As indicated by Sato and Ballinger (2016), the support may also come from the less competent students as they share different perspectives and collaboratively construct meaning through negotiating ideas with one another. This study also believes that students’ collaborative interactions during the online peer feedback activity can lead to their revisions. While the learners are being exposed to peers’ perspectives along with exchanging ideas with one another, they become aware of their errors and subsequently make revision in their writing. In this regard, social interaction or collaboration is considered as the ‘chief method for learning’ (Powell & Kalina, 2009) and that the development of knowledge is a social process arising as a result of interaction in the social milieu (Choi, 2002; Storch, 2011).



With respect to these two relating constructivism perspectives on social constructivism and cognitive development, from Vygotsky’s perspective on learning, the ways individual learns arise from social interaction, culture, and language while Piaget believes that knowledge stems from individual’s own schemas. From Piaget’s

view of knowledge construction, one processes information based on personal experience or what already exist and that social interaction may be regarded as part of the learning process (Powell & Kalina, 2009).

The focus of Vygotsky's approach on social interaction is more on the support from adult guidance while Piaget regards interactions between peers as important and may be much more beneficial than those of adults (Tudge & Winterhoff, 1993). To illustrate, during child-adult or student-teacher discussion where different perspectives arise, adult or teacher' argument tends to be easily accepted by student. This could be resulted from unquestioning belief in adult's greater knowledge (Tudge & Winterhoff, 1993, p. 69). However, when interacting with peers, individuals may question each other's opinion, the situation which Piaget indicates as cognitive conflict. This is supported by Damon (1984) who proposes peer interactions as a trigger for change. In other words, the feedback from child's peers tends be taken seriously in terms of motivating individual to resolve contradiction (Damon, 1984, p. 333). In this conflict, students develop their knowledge whether by means of negotiation for meaning or searching for more information from other sources in order to confirm their beliefs.



Similar to Damon (1984)'s concept of knowledge reconstruction, Choi (2002) asserts that peer interactions provide individual with opportunity to learn through cognitive conflict. That is, several different opinions from peers enable the learners to fill the gap in their existing knowledge through the process of reflecting on new knowledge to justify or defend conflicting positions (Choi, 2002, p. 4). Additionally, students' awareness of their cognitive conflict is also found to affect the quality of their writing. In Y.-F. Yang (2010)'s study, changes between students' first and final drafts were compared and how the students evaluated their peers' comments were

explored using system designed (trace result), including retrospective interviews to justify their reasons of accepting and rejecting to revise according to feedback. The research found that students who actively engaged in evaluating peers' comment and those who are aware of the difference between their first draft and peers' comments, made significant changes and improvement in their revisions (Y.-F. Yang, 2010).

In consideration of peer feedback in relation to Vygotsky's social constructivism and Piaget's concept of cognitive development, peers' contribution during social interaction is regarded as important for individual's learning. While cognitive development portrays knowledge as initiated by the interactions between peers, social constructivism considers peers interactions as the factor that shapes how the learners acquire their knowledge. Consequently, teachers should apply their teaching methods in consideration of both cognitive and social constructivist as both views can be interactively incorporated for the best personal development of the learners (Powell & Kalina, 2009, p. 247).

Building on Piaget's concept of cognitive development and Vygotsky's social learning, the researcher proposes peer feedback as an activity that promotes social constructive learning. In this activity, the students engage in deeper cognitive processing while providing and receiving explanations from peers as they will have to clarify their ideas, reorganize information, correct misconceptions, and develop new understanding (Damon, 1984; Xun & Land, 2004, p. 10). From this notion, peer feedback tasks should elicit students' cognitive conflicts and their knowledge development. To illustrate, in peer feedback activity, students may encounter cognitive conflicts, the situation in which they have to provide explanation and justification of their own positions. Choi (2002) asserts that students should

experience such cognitive conflicts in order to activate knowledge re-construction. These cognitive conflicts are believed to occur when the learners experience disagreement with peers' commenting or suggestions; they will recognise uncertainties about their knowledge and seek information in order to resolve their disagreements with peers (Xun & Land, 2004) before making decision on revising their written work.

Nevertheless, not all peer interactions will stimulate cognitive conflicts, especially in the case with the meaningless interactions. Choi, Land, and Turgeon (2005) suggest that peer interactions can be considered as meaningful when students raise thoughtful or constructive questions along with providing critical feedback. This is supported by Xun and Land (2004) who indicate that providing questions and explanations (critical feedback) contribute to effective interactions that mediate peers' learning. By supporting students to generate questions and critical feedback should then lead to meaningful interaction and knowledge construction. Considering this perspective, this research suggests training the learners on questioning strategy including specific types of questions and how constructive feedback should be provided to peers.



## 2.2 Peer-questioning

Based on socio-cognitive perspective, cognitive conflict that occurs during peer interaction is an essential element for the restructuring of knowledge. It scaffolds students' learning by promoting their deeper understanding. This concept is related to peer questioning which has been described as a strategy that encourages learners to use their dialogues as a tool to ask questions. With the intention to gain understanding of the text, peer questioning allows individual to response to their

peers' questions in order to discuss, exchange ideas and negotiate meanings on the same topic (Y.-F. Yang & Hsieh, 2015). Peer questioning has also been proposed as a strategy that triggers individual's cognitive conflict through the process of challenging them to reflect on the gap between their current knowledge and different perspectives that are presented by their peers (King, 1990).

According to Choi et al. (2005), peer interaction can facilitate cognitive conflict which is not always detected by students themselves. That is, different thoughtful questions or perspectives from peers may lead students to the justification of their own stances. Based on this notion, peer questioning may enlighten the learners by fostering the resolution of the cognitive conflict as thought-provoking questions would raise students' curiosity and prompt them to clarify their ideas to others. In these reflective processes, it is believed that knowledge is co-constructed as the learners develop their metacognitive by attempting to crystallise their own cognition with the aim to provide answer to their peers' questions through clarifying concepts, reorganising information, resolving inconsistencies and developing rationales (King, 1990). Despite its cognitive benefit of peer questioning, this activity may not successfully promote social learning if the students are not well informed of how to generate useful questions.



*"Meaningful discussion that facilitates reflective thinking can be initiated when learners raise thoughtful questions or provide critical feedback; however, generating effective questions requires a certain level of domain knowledge and metacognitive skills of the question-askers."*

(Choi et al., 2005, p. 483)

Choi et al. (2005) explain the situation in which the learners do not possess the abilities to ask the right question and to generate constructive comments as a "metacognitive knowledge dilemma". In order to deal with these circumstances, a peer-questioning support framework including types of peer questionings strategies has been discussed. Peer-generated questions should prompt the individual to clarify or elaborate one's own initial ideas, the questions should include different ideas or disagreements that foster cognitive conflicts that lead the learners to revisit or justify their positions. Finally, the questions that are meaningful and thought provoking could be the ones that promote critical thinking such as hypothetical questions.

Teacher should then not only provide students with learning environment that support peer interaction but the learners need to be instructed how to generate effective peer questioning and feedback. Engaging students in socio-cognitive activities such as peer feedback will provide the students with opportunity to construct new meaning and gain deeper understanding. In peer feedback, the learners are exposed to different views on a problem so that they can negotiate and justify their ideas with the goal to achieve common perspective. With respect to peer response activity, peer questioning strategy is not only beneficial for the students who receive questions from peers, but the peer-reviewers can also gain advantage from thinking critically before asking meaningful questions. The next part of this chapter will illustrate how students gain benefit through meaningful interaction in relation to the concept of negotiation for meaning.

## 2.3 The role of interaction

2.3.1 Classroom interactional competence (CIC)

How learning occurs through interaction is related to the notion of Classroom Interactional Competence (CIC). Focusing on teacher-students interaction, Walsh defines classroom interactional competence (CIC) as 'Teachers' and learners' ability to use interaction as a tool for mediating and assisting learning' (Walsh 2011, p: 158). Its emphasis is on how learning can be developed through the interactional decisions and subsequent actions (p. 5)

In the context where learning is believed to occur socially, the ability to construct meaning during the interaction is regarded as the key contribution to learning. To achieve this, the students should be allowed time or space to reflect and not to be disturbed by teacher's need to break silence. Walsh (2012) suggests that the ability to produce accurate language is not sufficient in terms of interactional competence. The ability to be comprehensible or to reach understandings is also need to construct meanings during the interaction.



2.3.2 Comprehensible input

The notion of negotiation for meaning (NfM) has been discussed as in relation to SLA theory. According to Krashen (1982)'s concept of comprehensible input, learners acquire the language when they are being exposed to input that they can understand or as Krashen puts it, the input that is a little beyond the learners' current knowledge. To illustrate, when it is infeasible to achieve mutual understanding of the messages, individuals will attempt to reformulate the 'incomprehensible' input in order to make it 'comprehensible' through the process

of negotiation for meaning (NfM) by adjusting and restructuring interaction (Cook, 2015; Lee, 2001; M. H. Long, 1996; Pica, Young, & Doughty, 1987). That is to say, it is when the interlocutors negotiate for meaning that the gap in comprehension can be reduced or eliminated.

Research indicates that without negotiated interaction, receiving input per se is not sufficient for learning to occur (Lee, 2001). Negotiation for meaning can be identified in various forms or strategies depending on the context and task that students are asked to accomplish. However, several studies have discussed conversational adjustment according to three main categories (Foster & Ohta, 2005; Lázaro & Azpilicueta, 2015; M. Long, 1985; Pica et al., 1987): (1) comprehension checks, (2) clarification requests, and (3) confirmation checks.

The first category of negotiation for meaning through face-to-face interaction is 'comprehension checks' which relates to when the message sender checks whether the content conveyed is understood correctly by the message receiver. This can be done by using various forms of questions such as tag questions and rising question intonation of the speaker' message repetition. As for 'Confirmation checks', they can be referred to when the interlocutors make sure if they understand the message of the senders correctly. Lastly, this strategy of NfM can be done face-to-face by using rising intonation questions that elicits answer assuring understanding of the interlocutors.



Finally, 'clarification requests' are interpreted as when the interlocutor' s preceding message needs further clarification and that new information may be required in order to clarify the message conveyed. Similar to other types of NfM that are usually initiated by the use of questions, clarification requests can consist of Wh- and tag questions that require the message sender to provide more information on

the part of the preceding message that is still unclear. Despite different aims of usages, these three types of NfM share a common objective that is to ensure mutual comprehension during the interaction.

2.3.3 Peer feedback and online interaction

It has been acknowledged that feedback provided during interaction connects with L2 development in the sense that it can promote SLA (Mackey, 2006) and that interactivity is an important contribution in learning (Hull & Saxon, 2009, p. 627). However, Woo and Reeves (2007) assert that not every interaction lead to learning, research indicates that only interaction that is meaningful can promote learners' intellectual growth (Woo & Reeves, 2007, p. 1). This concept can be explained in consideration of the notion of negotiation for meaning. If feedback given is to encourage learning, it has to be understandable. That is, students learn from others' feedback only when it is meaningful and comprehensible to them.

Negotiation for meaning usually occurs when the students who comment on their peers' writing are informed that their feedback is neither clear nor comprehensible. That is, they realise the need to work on elaborating their comments and providing further explanation in order to ensure mutual understanding. In addition, research also maintains that the use of L1 as a mediating tool can assist the progress of negotiation process (Lee, 2008).



Although the extent and the way students negotiate for meaning cannot be ensured during face-to-face interaction, online environment can perhaps enable more negotiation for meaning according to these following reasons: it stretches the classroom boundaries by allowing both synchronous and asynchronous

communication to take place outside the class. Additionally, the aspect of anonymity encourages the learners who are shy to negotiate face-to–face to exchange more information during online interaction.

Technology can be incorporated into peer commenting as a form of online platform that prompts the students to negotiate more with one another. This is supported by Lee (2001) who indicates that computer-mediated communication (CMC) may better promote self-correcting when compared to face-to-face interaction because the former allows sufficient time for input processing, output editing and monitoring (Lee, 2001). Additionally, CMC also creates a self-paced learning environment in which students have opportunities to read and type comments at their own pace (Lee, 2001) and to organise their ideas before putting them into words.

Another explanation of why Interacting through online mode should elicit more NFM from the learners is that it allows for anonymity. According to Foster and Ohta (2005), NfM can be tedious and face threatening. That is, students who do not comprehend their peers' comments may not ask the feedback providers for further clarification or explanation as they do not want to lose face by appearing fool as a result of not being able to understand feedback received.



However, online environment promotes learners to ask questions and clarify their comments as it allows the learners to give and receive feedback without being revealed their handwritings and identities. This is supported by previous research indicating that anonymous peer review enables students to comment freely without having to worry about interpersonal factors due to the fact that anonymity is believed to reduce social pressure (Lu & Bol, 2007). The online context should then

compromise the issue of face threatening and hopefully creates a collective scaffolding environment by equipping the students with opportunity to help one another through the process of interaction(Foster & Ohta, 2005; Lee, 2001).The following section reviews patterns of interaction in relation to the notion of social learning.

## 2.4 Patterns of interaction

How to encourage the students to construct knowledge from social learning and become individual writers has been seen as a challenge for instructors (Roberson, 2014, p. 25). Roberson (2014) indicates that engaging the learners in peer feedback can foster this connection between social (the peer reviewer-writer interaction) and individual's writing development (cognition).

Previous studies showed that when the students work collaboratively during peer interaction, they improved their writing in terms of better revision outcomes (Roberson, 2014; Storch, 2002); however, Roberson (2014) also asserts that not all peer feedback sessions mean students' collaboration that lead to learning and that the pair dynamics during peer feedback interaction should be consequently explored.

Storch (2002) investigated the pattern of dyadic interactions and the effects on ESL students' language development in order to examine if these interactions relate to different learning outcomes of the learners. The students were asked to complete three different grammar-based tasks: a short composition; an editing task, and a text reconstruction task. The interactions of 10 pairs were chosen for the

analysis. The patterns of dyadic interactions were distinguished in terms of equality and mutuality and four patterns emerged from the data analysis, were as following: (1) collaborative, (2) dominant/dominant, (3) dominant/passive, and (4) expert/novice.

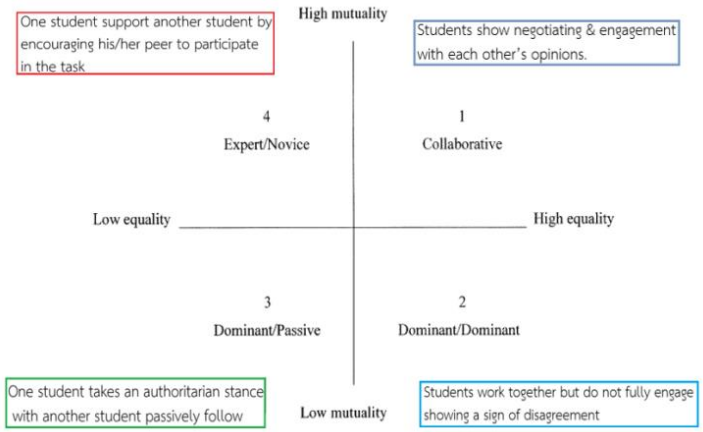


*Figure 1 Storch's (2002) model of dyadic interaction.*

It was found that the predominant pattern of dyadic interaction was the collaborative pattern and that the two patterns of interaction that were found to scaffold students' performance were 'collaborative' and 'expert/novice'. With the aim to trace the effects of pair talk on students' subsequent performance, the research further analysed students' dyadic interactions along with the subsequent tasks that that they were asked to complete individually. The collaborative dyad and the expert/novice dyad showed more evidence of knowledge transferring than in the dominant/passive and the dominant/dominant dyad. The implication that these findings may have for language learning is that the learning can occur when the students work collaboratively in the process of knowledge co-construction in which

the members of the dyad internalise the knowledge gained from social support (Storch, 2002, p. 148).

Based on the notion that social interaction is connected with individual cognitive development, Roberson (2014) applied a case study, building on Storch's (2002) and Zheng's (2012) patterns of interaction framework to investigate the patterns of interaction among peer response of 10 undergraduate students and explored their impact on the students' revision outcomes. The transcripts of peer response interactions, students' drafts: First and second of three writing assignments, and stimulated recall interviews were utilised as data sources. The students' types of revision in their second drafts were classified along with the identification of comment types and their uptake in the second drafts. Inductive qualitative and descriptive statistic was adopted in the data analysis. In line with Storch's (2002) study, 'collaborative' was found to be the most common pattern in this study. Additionally, the writers with high mutuality who took novice and collaborative patterns of interaction, incorporated a higher percentage of feedback, compared to those with lower mutuality patterns. Although the nature of peer interaction and its contribution to learning has recently gain attention in L2 research, the interaction of pairs with different proficiency levels has not been thoroughly studied (Watanabe & Swain, 2007).



In an attempt to address this under-explored area, Watanabe and Swain (2007) examined how students interact with their higher and lower proficiency peers by exploring 12 Japanese learners' collaborative dialogue and their post-test performance in order to investigate the effects of proficiency differences and patterns of interaction on L2 learning. In this study, four students were core participants who interacted with their lower and higher proficiency peers. That is, the

core students were paired twice, each time with higher and lower proficiency students. A pre-test was a target essay that the learners jointly composed. Native writers then rewrote essays. A revised version was given back to each pair in order that they could compare between two written works. Each student then individually wrote an essay again by revising the original text. Their revised versions of original essay were utilised as a post-test. Research found that when students engaged in a collaborative interaction, the core participants could also gain their knowledge when working with lower proficiency students. The findings of this study support the notion of peers as social mediation who can help one another constructing knowledge regardless of their level of L2 proficiency.

The next part of this chapter will discuss writing approach regarding the shift of focus from produced-oriented approach to process-oriented approach in writing instruction.

## 2.5 Process-oriented approach in writing instruction



The process oriented approach has been accepted and applied to EFL and ESL writing classes since 1980s (Onozawa, 2010).In the process oriented approach, the goal of writing is not to encourage the writers to compose a text without any grammatical errors, but rather to support them to make their texts comprehensible. Badger and White (2000) refer to the teacher's role in the process-oriented approach as a facilitator who draws out the learners' potential and help them developing their writing skills (Badger & White, 2000, p. 154). Feedback from both teacher and peers is valued in this process-based approach (Matsuda, 2003). By receiving and acting upon feedback from several sources, the learners would be formatively assessed with the aim to produce a good piece of writing. The teacher's role would be to create this

environment for the learners to work together and to help them throughout the composing process.

The process-based approach does not lay emphasis on the knowledge about the structure of language or the imitation of input as in the product-oriented approach. Instead, it gives less importance to the linguistic knowledge and focus more on the process or stages involved in composing writing(Badger & White, 2000). The stages in the process approach has been generally seen as consisting of prewriting; composing/drafting; revising and editing or publishing the final text (Badger & White, 2000, p. 154; Sun & Feng, 2009). The composing is considered as a cyclical process in which the writers can go back and forth to improve their texts (Badger & White, 2000; Berggren, 2013; Lehr, 1995; Onozawa, 2010; Williams, 2004). Similarly, Krueger (2006) indicates that writing should be seen as a "nonlinear cognitive process" in which each stage is connected to one another and occurs recursively throughout the composing process.

According to Zareekbatani (2015), the writers should work in collaborative workshop environment so that they will have opportunity to brainstorm and support each other. At the pre-writing stage, the writers discuss with others, making use of their background knowledge and gaining new perspectives prior to the composing stage. The teacher should allow the learners to revise and write multiple drafts as composing multiple drafts and receiving formative feedback are regarded as important to writing (Matsuda, 2003, p. 21).

In the product-based approach, the writers do not have much opportunity to work on their drafts as little time is devoted to the process of writing, they simply write with the aim to produce error-free written work in order to meet their teacher's requirement. Despite the shift of focus, Ngame (2006) suggests that both the process

of writing and the final products should receive equally attention in writing instruction and that the learners should be instructed to develop both linguistic competence and cognitive process beyond language learning.

## 2.6 Peer feedback as an assessment for learning

In educational context, the goal of assessment should not be limited only for the teacher to judge students' performance but to enhance the improvement in both teaching and learning. Assessment should provide instructor with information that can develop the way of teaching (Nicol & Macfarlane-Dick, 2006) and serve as a guidance and motivator for the students to make progress in their learning. While the summative assessment seeks to demonstrate how much the students have learned by evaluating them at the end of the course, the real objective of assessment should instead occur along with teaching and learning activities.

Sadler (1998) refers to when the students are evaluated formatively as "assessment that is specifically intended to provide feedback on performance to improve and accelerate learning" (Sadler, 1998, p. 77). It is then regarded as an assessment *as* learning in which the students participate in an ongoing assessment and as an assessment for learning with the aim to diagnose the learners' problem and provide information for developing students' knowledge (Berggren, 2013). According to Nicol and Macfarlane-Dick (2006), the students should be allowed to take part in this diagnosing process in order to be able to take responsibility for their own studies. However, the teacher is usually the main evaluator who assesses and generates feedback for the students despite a "shift in conceptions of teaching and

learning" through which the learners should play a more active role in their own learning (Nicol & Macfarlane-Dick, 2006, p. 200).

Based on the notion that learners should be able to manage their own studies and participate actively in all assessment process, there is a need to promote independent learners by developing students' abilities to evaluate each other's work. In this process, the students should be familiarised with the assessment criteria and apply it to judge their peers' work (N.-F. Liu & Carless, 2006; Nicol & Macfarlane-Dick, 2006).

In order to promote independent learners who can take active part on their learning, the English language learners should be able to provide feedback to peers' writing for several reasons. To name but a few, to be able to evaluate one's own work, the students should be able to evaluate their peers' writing. Being able to comment on others' writing may lead the students to assess their own writing, as they would learn from reading and commenting on peers' work. It is also an opportunity whereby students practice their diagnosis and learn to solve problems (Patchan & Schunn, 2015).



Simply by receiving or being exposed to feedback is unlikely to be sufficient for learning, compared to providing feedback for others. Providing feedback involves several processes such as defining or understanding the task, detecting a problem through perceiving differences between the text produced and the intended text, diagnosing a problem, and choosing a revision strategy to deal with the problem (Patchan & Schunn, 2015). Consequently, peer feedback activity engages the students in defining the task, so they could realise what should be focused in their writing. In other words, the learners would have more opportunities to practice detecting a problem when commenting. It is believed that the writer could better detect

problem in others' written work, compared to their own. This is supported by Lundstrom and Baker (2009) who suggest that "to give is better than to receive". In other words, by evaluating their peers' writing, the students could then learn to practice detecting problem in their own writing. In addition, when the learners diagnose problems in their peers' work, they tend to be more aware of those kinds of writing problems when writing their own task. In addition, when the learners provide comments to peers, they will have to find solutions to problems in their peers' writing and they may come up with revision strategies that could be applied in their own writing (Patchan & Schunn, 2015).

According to Lundstrom and Baker (2009) and Sotoudehnama and Pilehvari (2016), the learners might develop skills needed to evaluate their own work through the process of applying assessment criteria to judge their peers' writing (Lundstrom & Baker, 2009; Sotoudehnama & Pilehvari, 2016). Sotoudehnama and Pilehvari (2016) indicate that the ability in assessing peers' writing would help the peer-assessors to realise the potentially similar mistakes in their own work and enhance their ability in detecting their errors while developing their self-assessment skill. Consequently, being able to provide feedback to others will encourage students to gain more insight into their own work and make revision of their own writing as they improve their self-revision skills (Wakabayashi, 2008).



As also indicated by Nicol and Macfarlane-Dick (2006), "opportunities to evaluate and provide feedback on each other's work help develop the skills needed to make objective judgments against standards, skills which are transferred when students turn to producing and regulating their own work" (Nicol & Macfarlane-Dick, 2006, p. 208). Along with this process, the teacher' role is a facilitator who has to

provide guidance and support for the students in order to achieve the objectives of the assessment for learning.

Engaging students in peer commenting does not only promotes cooperative learning, it also supports them to understand the goal of their writing. When giving feedback to peers, they will have to go through the criteria of writing task that remind them of the purpose of their own writing. Consequently, teacher is not the only knower who can help the students to learn but they can also gain knowledge by themselves. They would take charge of their learning as independent learners (Bijami, Kashef, & Nejad, 2013; Charoenchang, 2013; Rollinson, 2005) who play active role in their own learning and realise their writing as a process that is not simply a product to meet educational requirement.

2.6.1 Peer feedback in writing instruction

Peer feedback, also known as peer response and peer assessment, can be viewed as an instructional activity whereby the information or comments on the students' writing are formatively provided by their peers with the aim to assist one another to develop their written work through revising and composing multiple drafts. Peer feedback, by definition, is referred to as a form of formative assessment and an activity in which the students extend their learning by collaboratively help one another to construct knowledge in a social learning environment (Gielen et al., 2010; N.-F. Liu & Carless, 2006).

Since 1990, peer feedback has been applied as an instructional method to ESL/EFL writing classrooms, the students are encouraged to comment on their peers' draft in order to improve each other's writing (Chen, 2016). It is regarded as "a

central part of the learning process" (N.-F. Liu & Carless, 2006, p. 281) as it enhances students' learning (Falchikov, 2001; N.-F. Liu & Carless, 2006; Wanchid, 2007) and provides them with ideas as a source of rich information in facilitating their comprehension. In addition, the learners do not only have more opportunity to be exposed to sufficient feedback, but to a variety of their peers' writing.

Peer feedback is beneficial in terms of promoting independent learners (Rollinson, 2005), student-centred learning and collaborative learning (Gielen et al., 2010). That is, the students become less dependent on their teacher as they take more responsibility on their own learning through giving and receiving peer feedback. Generally, peer feedback empowers the students with a sense of autonomy in their writing (K. Hyland & Hyland, 2006); Yu and Lee (2016a) , both the giver and the receiver of feedback become independent learners, realising that they have power over their own texts (Fordham, 2015; N.-F. Liu & Carless, 2006) and have potential to improve their writing (Baker, 2016). In other words, the student reviewers have to critically read their peers' writing before generating feedback while the student writers have to reflect on those comments received before deciding to incorporate them into their revisions or to search for more information in the case that they are not certain or may not agree with the feedback.Gielen et al. (2010) point out that the uncertainty of the feedback received could prompt the students to develop a "Mindful reception" which is believed to deepen their understanding. In this regard, the students are the centre of their own learning; they are viewed as active learners who are no longer just empty vessels, waiting upon teacher as in the traditional class.



Apart from developing a 'mindful reception' in feedback-receivers, allowing them to decide if they should revise their writing based on their peers' comments,

the features of peer feedback have been found to be related to the learners' subsequent revisions. Nelson and Schunn (2009) found that the feature of peer feedback that promotes students' understanding of the feedback itself could affect their revision behaviour. The solution provided within peer feedback presents new perspective, enabling the learners to comprehend the problem of their written work which consequently leads to the incorporation of feedback received into their revisions (Nelson & Schunn, 2009). This is supported by Van der Pol, Van den Berg, Admiraal, and Simons (2008) who discovered that the feedback with concrete suggestion was found to be significantly related to students' successful uptake of the feedback (Van der Pol et al., 2008). Additionally, Gielen et al. (2010) assert that the feature of students' useful comments are those with the justification of their ideas (Gielen et al., 2010) and that the students who receive feedback from multiple peers were found to make more complex repair revision - a significant predictor of writing quality (Gielen et al., 2010)

Recently, the research in second-language writing examines the benefits of peer feedback for feedback-givers (Lundstrom & Baker, 2009; Yu & Lee, 2016a). Previous studies found that peer reviewers made more gains that are significant in their writing, comparing to those who simply received feedback (Lundstrom & Baker, 2009; Sotoudehnama & Pilehvari, 2016). These findings suggest that the students learn to evaluate their own written work using the skills acquired through assessing others' writing. According to Noonkhan (2012), engaging the students in generating feedback and receiving comments from peers also allow them to understand the roles of the writer and the reader, the understanding of different roles in peer feedback should promote a sense of audience awareness which can lead to a clear purpose of writing.

2.6.2 Peer feedback and proficiency levels

In consideration of students' writing improvement and the proficiency levels of the giver and the receiver of comments, the learners with lower proficiency level tend to make more gains than those with higher proficiency. Lundstrom and Baker (2009) suggest that EFL students' writing improvement could be varied according to their English proficiency levels. The research discovered that the low proficiency reviewers made more significant gains than those with higher proficiency, suggesting that the students with beginning level have more room to develop their writing ability (see Lundstrom & Baker, 2009, p. 139).

Similarly, the findings from Sotoudehnama and Pilehvari (2016) also show that the lower proficiency givers of feedback could make more progress in their writing when comparing to the higher proficiency reviewers. However, the complex nature of writing could be overlooked in Lundstrom and Baker (2009)'s and Sotoudehnama and Pilehvari (2016)'s research as both studies utilised a timed essay as pre- and post-test to investigate students' writing performance. In addition, the students did not receive feedback on their own writing. They did not interact with each other about the feedback received. The context of these previous studies could have been more authentic if the students receive feedback on their own writing because it might facilitate their understanding of the feedback and realise the gap between their actual texts and those they intended to write.



According to Vygotsky, students with different proficient levels tend to scaffold one another better than a group of those with the same level of proficiency. This concept is based on the zone of proximal development or ZPD (Vygotsky,

1978a), suggesting that the students' potential level could be developed by the help from more capable peers and through social interaction. However, it might also be interesting to explore if the lower proficiency students could also scaffold those with higher proficiency in some aspects of writing such as idea and organisation.

L2 proficiency of students has been seen as a challenge for peer feedback activities, for example, low proficiency (LP) students are likely to focus on surface errors (McGroarty & Zhu, 1997) as cited in (Yu & Lee, 2016b, p. 485). Although the low-level proficiency of students have been portrayed as an obstacle to peer feedback, Yu and Lee (2016b) suggest that having low proficiency is not necessarily regarded as a limitation that prevents peer feedback activities from being successfully organised.

In Yu and Lee's (2016b) case study of 12 first year EFL students with different English language proficiency levels, the focus of feedback and the extent to which 3 LP students could provide comments to their group members were examined. The amount and the focus of LP students' feedback were analysed by transcribing the recordings data of four feedback sessions for one essay. The research found that LP students could generate a substantial amount of feedback by commenting on various aspects of writing, including content and organisation. The research further investigated the uptake of LP students' comment and its impact on their peers' revision quality.

Adopted Zhao's (2014) procedure, LP students' feedback were analysed in terms of its incorporation which could be identified as fully used; partially used, and unused. It was found out that, their group members integrated most comments. Additionally, the researcher utilised Min's (2006) approach to explore the quality of students' revision which was classified as revision better, original better, and no

change. The text quality was found to be generally enhanced by the incorporation of LP's feedback with 83.3%, 91.3%, and 100% revision better. The findings of this study illustrated positive result of LP students' comment on the writing quality of group members and their attitudes toward the usefulness of LP students' feedback. An important implication stemming from these positive results was attributed to the use of L1 as a mean to commenting. The research suggests for further study on how the patterns of interactions can impact on students' learning and text revision (Yu & Lee, 2016b, p. 493).

2.6.3 The significance of providing global feedback vs. local feedback

Global and local aspects are two focuses of feedback. The global aspect generally concerns content/idea and organisation, involving organisation/unity, development, and cohesion/coherence while the local aspect comprises of language structure, vocabulary, and mechanics (Sotoudehnama & Pilehvari, 2016).

In terms of the scope of feedback, global level is also viewed as "a holistic examination of the performance or product", for example, organisation or connection in content. According to Nelson and Schunn (2009), the complexity of the global issues depend considerably on the nature of the writing task which may impact the students' ability to provide feedback. As for the local aspect of writing, it is defined as "a narrow focus during evaluation" such as surface features (Nelson & Schunn, 2009, p. 380) which improves only the surface level writing. On this point, the overall quality of writing tends to be more affected by the global feedback when writing is evaluated.

While the global or content feedback focuses on writing as a whole, the local feedback or form focused feedback, involves assessing students' writing on grammar, mechanics, and vocabulary levels. Bijami et al. (2013) assert that the learners usually focus on form over content and fail to address the meaning issues, as they tend to edit or correct grammar on the surface level. Although receiving feedback on the local level is essential for learning because it encourages the learners to acquire the language elements such as grammar and vocabulary, etc., the global feedback is also important as it enables the students to view their writing as a whole. The learners could then realise that the quality of their written work does not solely relate to their language performance but also to other elements such as content, ideas, and organisation.

In consideration of 'global' comment, apart from focusing on content and organisation of peers' writing, students should also pay attention to the logical fallacies of one's written work. According to a handout about logical fallacies in writing by the writing centre at UNC- Chapel Hill, 'logical fallacies' or 'fallacies' are defined as defects that weaken arguments, individual learns to develop the ability to evaluate the arguments through learning to search for them in one's own writing and others' written work. Logic or reason has also been related to the concept of critical thinking.



With respect to students' comments, it should also address the reasons presented in their peers' writing, for example, it may evaluate whether the assumptions made are based on personal experience or facts that have been widely accepted in order to judge if they are sufficiently for the claim generalised. As pointed out by Stapleton (2001), the inadequate reasons can weaken the argument that they support. Additionally, raters should also look for evidence that is used to

support arguments in terms of personal experience, facts, statistic, for instance (Stapleton, 2001, p. 517). The logic in writing can be addressed by asking these following questions: does the statement that one expresses own reason or evidence support the conclusion or does the relation between two things that the writers are trying to convey really impact on each other?

With this respect, the global feedback is seen as essential part of students' learning as it allows them to look at their writing holistically and to develop the global issues along with the local aspect. Although grammar has been regarded as vital in second language writing instruction (Frodesen & Holten, 2003), the global aspect such as content and organisation should also be taken into consideration in ESL writing class.

## 2.7 Computer-mediated peer feedback

Computer-mediated communication (CMC) is referred to when computer is utilised as a tool for communication by means of synchronous or asynchronous interaction (H.-J. Wu, 2015). CMC does not only facilitate the process but also provides opportunity for boundless communication:



> *Human interaction is easily transmitted, stored, archived, reevaluated, edited, and rewritten through a computer-mediated form... time- and place independent communication allows users to write and receive messages at any time of the day from any computer with an Internet connection*
>
> (Warschauer, 1997, pp. 472,474).

The incorporation of computer-mediated communication (CMC) into peer feedback activity has been found to be beneficial in terms of facilitating the feedback delivering process through the use of online tools such as social networking sites (Balasubramanian, Jaykumar, & Fukey, 2014) and web-based technology (Sung, Chang, Chiou, & Hou, 2005). According to Liou and Peng (2009) "self-publication allows students' writing to be immediately seen" (Liou & Peng, 2009, p. 516), enabling the students to comment as soon as their peers' writing is posted online. Yuan and Kim (2015) point out that the learners prefer immediate feedback and tend to lose interest when it is not provided timely before moving on to another assignment.

According to Brookhart (2008) and Gielen et al. (2010), a good feedback should be provided timely within the time for application (Brookhart, 2008; Gielen et al., 2010). In other words, the sooner the feedback is given, the more effective it would be for students' learning (Irons, 2007). This is supported by Yuan and Kim (2015) who point out that the learners prefer immediate feedback and tend to lose interest when it is not provided timely before moving on to another assignment. However, teachers might not be able to give immediate feedback due to the amount of work to be done and the number of students per class, particularly in the EFL context where there might be at least 30 students per class. Consequently, CMC should be applied to peer feedback tasks in order to stretch the boundaries of the classroom and allow the students to connect and provide timely feedback to one another. As with the help of web-based technology, more feedback could be generated in less time (Sung et al., 2005).

In ESL/EFL writing classroom contexts, the use of technology has been introduced as “a way to promote interaction about writing through peer response groups” (Ware & Warschauer, 2006, p. 109). A growing body of research has examined the way technology could be incorporated into feedback practices in order to enhance its effectiveness (Irons, 2007). The focus of research in the area of peer feedback has therefore been shifted from the traditional peer feedback towards the exploration of the effects of computer-mediated peer response on the students’ writing.

An electronic peer feedback has become widely available as an alternative assessment to face-to-face peer feedback (K. Hyland & Hyland, 2006; Wanchid, 2013; Yu & Lee, 2016a). Research indicates that it does not only promotes students’ autonomous learning, but also motivates them to write (Wanchid, 2013). The use of online blog has been proposed as an additional tool that extends the instruction beyond the writing class and positively affects students’ writing performance (Arslan & Şahin-Kızıl, 2010; Shams-Abadi, Ahmadi, & Mehrdad, 2015). Additionally, e-feedback encourages balanced comments with an awareness of the audience’s needs and enables the learners to make critical comments on each other’s writings due to anonymity in online environment (Guardado & Shi, 2007, p. 443). With such tool, the gap of classroom’s limitations such as time constraint, teachers’ workload, and lacking of critical comments on peers’ writing can be reduced.

Computer-mediated peer feedback also creates a self-paced learning environment in which students have opportunities to read and type comments at their own pace, it promotes self-correcting when compared to face-to-face interaction by allowing sufficient time for input processing, output editing and

monitoring (Lee, 2001). Additionally, an online communication encourages the learners to ask questions and clarify their comments as it allows them to give and receive feedback without being revealed their handwritings and identities. found that the anonymous peer review reduced social pressure and enabled the students to comment freely without having to worry about their interpersonal factors. Incorporating CMC into peer feedback then compromises the issue of face threatening and creates a self-pace learning in a collective scaffolding environment (Foster & Ohta, 2005; Lee, 2001; Lu & Bol, 2007).

The use of CMC such as a discussion board was found to create supportive learning community through students' online interaction (D. Zhang, 2009). According to Guardado and Shi (2007), an online interaction has also been suggested to increase students participation in peer feedback tasks and to encourage them to provide critical feedback to peers. Providing online comments can be less threatening for the learners as there is no physical presence of their peers, reducing psychological pressure (Ho & Savignon, 2007; Lu & Bol, 2007). The students would then feel less stressed to provide more critical feedback to peers (Chang, 2012).



Computer-mediated communication has also been found to have positive effects on students' writing performance. Shang (2007) investigated the effects of using asynchronous e-mail exchange on the writing performance of EFL learners. Based on the pre- and post-writing tasks, the computerised text analysis program called Wordsmith Tools (Scott, 1996) and Grammatik of Word Perfect revealed that the students improved in their syntactic complexity and grammatical accuracy.

In peer feedback tasks, the online interaction provides opportunities for the students to be exposed to various inputs. Sung et al. (2005) assert that web-based

technology enables the learners to observe the others' work so that they would be able to judge their own writing. In other words, while reading several of their peers' written work and receiving feedback from others, the students would gain different perspectives on their own writing.

In terms of the relationship between online peer feedback and students' revision, Tuzi (2004) found that it could affect students' revisions on the macro-level changes, including sentence and paragraph levels; however, most of the changes in students' writing were introduced by the writers themselves. The research further indicates that although e-feedback was not seen as a main stimulus for students' revision purposes, it contributed by prompting the learners to clarify meaning and to add new information in their subsequent drafts. In other words, peer-feedback might not directly impact on students' changes in their subsequent drafts, but it could promote self-assessment by encouraging them to reflect on what they had written and to decide on making changes in their own work (Tuzi, 2004).

Previous research investigating students' feedback and their revisions also compare between traditional and online peer feedback groups. J. Liu and Sadler (2003) examine students' feedback in terms of the area (global versus local), the type (evaluation, clarification, suggestion, and alteration), and the nature (revision- or non-revision-oriented). With the analyses of students' peer comments and students' revision in the second draft along with the investigation of peer review from the two groups of students, the online group was found to demonstrate larger number of the overall comments and revisions including those that based on revision-oriented than the traditional group.

## 2.8 Challenges in peer feedback

The importance of applying peer feedback in scaffolding the students to be self-autonomous learners has been widely acknowledged. Whereas some are convinced that peer feedback could be useful activity to support learning, others maintain that it might not be successful in some cases (N.-F. Liu & Carless, 2006). To illustrate, although peer feedback could be beneficial in terms of scaffolding the students to collaboratively learn through a social community (Gielen et al., 2010; Hansen & Liu, 2005; N.-F. Liu & Carless, 2006; Min, 2005), the validity of peer feedback itself could not be ignored. Research indicates that peer assessment in which students provide the writing scores can cause resistance in terms of the reliability of the marks. In addition, the learners usually hold the perception that teacher should be the one who is responsible for providing the feedback and scores (Liu & Carless, 2006).

Individual difference is another concern that may hinder the success of peer feedback activity. In other words, while some students feel confident with their writing and that they have neither trouble with expressing their written work nor with asking questions in public, others might not feel comfortable with the self-expression concept. Moreover, trustworthiness among peers could be one of the most difficult challenges in organising peer response activity. The question arises here is how a non-threatening atmosphere could be created and how the learners should be trained in order to build trust and trustworthiness among the students in order to solve the aforementioned issues.

In EFL contexts, challenges in peer response activity arise in terms of students' lack of critical feedback and participation. Research indicates that students' cooperation-oriented cultural background affects the way they provide feedback for

their peers (Liou & Peng, 2009); the students avoid making comments that might hurt other students' feeling. Peer feedback is then usually generated in a form of praise resulting in vague comments that lead to no improvement. This challenge has been partly tackled through the use of anonymous peer review whereby each student does not know their peer-reviewer's identity (Coté, 2014; Lu & Bol, 2007). The use of online tools such as online platform, e-mail, chat may also allow the students to comment on their peers' writing without having to worry about being recognised by handwriting.

## 2.9 Training for peer feedback

Training student for peer feedback or peer review training has been widely acknowledged to have positive effects on the students' writing process (Berg, 1999; Lam, 2010; Min, 2005, 2006; Rahimi, 2013). According to Rahimi (2013), the students who were trained prior to peer feedback could make significant writing improvement and generate more comment on global aspect such as content and organisation. In addition, previous studies have shown that the training does not only encourages more specific comments from the students (Min, 2005) and impact their revision types and writing quality (Berg, 1999; Min, 2006), peer review training also promotes "conscientious writers who take responsibility for editing their own work (Lam, 2010, p. 124).

Research stresses the importance of preparing ESL students before engaging them in peer response. To name but a few, Berg (1999) elaborates that peer feedback without training or preparation could be ineffective due to the complex nature of the task. In her guidelines of preparing ESL students for peer response activity, Berg (1999) indicates that teachers should explain the advantages of peer

feedback to their students in order to enlighten them on its value. This is supported by Lam (2010) who provides practical suggestions on peer review training and recognises the need of informing the purpose of peer feedback to students, including the benefits of peer review for writing before allowing them to take part in providing feedback for peers.

In the guiding principles of peer feedback activity, Hansen and Liu (2005) propose building trust among students before peer feedback in order to encourage negotiation of meaning. Instructors should create less threatening environment in which the students feel comfortable with commenting and discussing each other's work. Berg (1999) also suggests get-to-know-you activities to promote such comfortable environment. Moreover, a purposeful peer response sheet is regarded as useful (Hansen & Liu, 2005) to be applied as a checklist and a guideline that helps them focusing on providing comments and making revision (Berg, 1999).

Along with this, instructors can organize mock-peer response activities and questioning techniques should be presented in order to direct them to ask specific question and provide revision-oriented comments that leads to successful revision (Hansen & Liu, 2005, p. 36). In addition, teacher can monitor students' progress and stimulate them to discuss, ask questions and negotiate the meaning from feedback during peer response activity (Hansen & Liu, 2005).

In terms of the focus of peer review training, Lundstrom and Baker (2009) indicate that training in how to provide and apply criteria for evaluating peers' writing could perhaps be more beneficial than the training that simply teaches learners how to use feedback for revision (Lundstrom & Baker, 2009). This is supported by Sotoudehnama and Pilehvari (2016) who found that the givers of feedback could improve their writing more significantly than the receivers of the feedback when

receiving different trainings. That is, the former were instructed on how to provide effective comments for others' writing while the latter were trained for how to make use of and incorporate the feedback received into their revisions.

The implication that stems from these findings is that the opportunity to practice using criteria in assessing writing may contribute to the fact that the givers of feedback could make more writing improvement than the receivers of peers' comments, affirming the contribution of the training for peer commenting to the students' writing process. Concerning the effectiveness of peer feedback, whether online or paper-based face-to-face mode, research proposes peer review training as the key contribution to the quality of students' comments. In other words, the EFL learners could provide more revision-oriented feedback after they participated in peer review training (Liou & Peng, 2009). Tuzi (2004) also argues for students' initial training and practice of how to give specific feedback in order to help improving others' writings and that the students' feedback should be firstly focusing on the macro-level changes– changes at the sentence and paragraph levels.

Similar to W.-S. Wu (2006), the students should be well trained in how to give good peer feedback, they should be instructed to focus on the meaning first then they can look at the form later. Moreover, Guardado and Shi (2007) also emphasise on the need to train students and to discuss with them face-to-face after they have received e-feedback from their peers. Nevertheless, while the training could enhance the quality of peer feedback, it does not encourage students to incorporate those comments into their revision (Liou & Peng, 2009), the learners should also be explicitly introduced to revision strategies and instructed of how to make use of their peers' comments (Liou & Peng, 2009).

## 2.10 A conceptual model of learning through online peer feedback

Through the lens of Vygotsky's social learning and Piaget's cognitive development theories, this study proposes the conceptual model of learning through online peer feedback. It is based on the grounds that learning is individually constructed and socially enriched (Phuwichit, 2016). That is to say, social and cognitive dimensions play essential role in the understanding of language learning (Sato & Ballinger, 2016, p. 13).

The conceptual model of learning through online peer feedback illustrates the intertwinement between social and individual aspects in knowledge development. Since this study is in the area of peer feedback, it is based on the notion of learning through social scaffolding. That is, learning occurred through the support from peers. Based on constructivism theory, learning arises from social interaction and individual's cognitive conflict. This study believes that the students who engage in collaborative interaction with the aim to provide feedback and support to each other will be able to transfer their current knowledge and co-construct learning with the help from their peers.



The conceptual model proposed in this study involves these following components: 'collaborative interaction' that includes 'critical feedback' along with 'constructive questioning' in an online environment. This study regards these social components as key contributions to individual's 'cognitive conflict' that lead to the 'co-construction of knowledge'.

This research is also framed by the notion that the integration of technology in the form of online platform allows for the feedback to be anonymous. The anonymity aspect of online feedback will enable the students to provide comments that are more critical by eliminating the issue of collectivistic culture relating to face

threatening and by maintaining relationship and avoiding conflict with others. This study believes that critical feedback will scaffold the students to learn through social environment. Additionally, in order to promote learning, training students for peer-questioning is suggested as a useful strategy that can help the learners to ask constructive feedback which prompts the feedback receivers to reflect on their knowledge when providing answer to peers (Choi et al., 2005). When the students realise the gap in their existing knowledge that is between what is already known and what is yet to explore, they will attempt to bridge the gap that can lead to knowledge co-construction. To put it simply, the knowledge arises through social interactions with the support from others in an online environment. The conceptual model is illustrated in Figure 2.

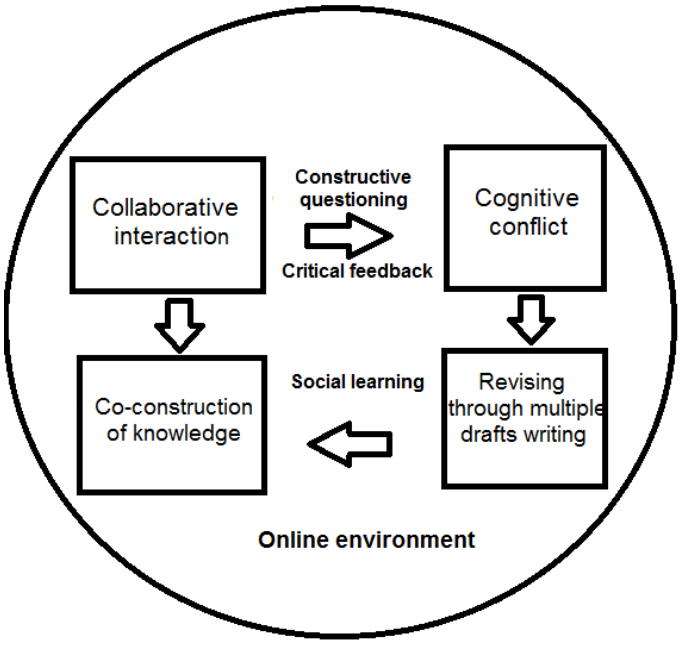


Figure 2 Conceptual model of learning through online peer feedback

In summary, this study proposes the conceptual model of learning through online peer feedback by illustrating students' learning as an internalisation of peers' interactions (Choi, 2002). In order words, peers' collaborative interactions during

online peer feedback activity could scaffold students to make revision. It magnifies students' cognitive conflicts by providing rich contexts for them to revise their current cognitive systems that lead to new meaning making (Choi, 2002, p. 31). In this respect, collaborative interactions during online peer feedback activity are considered as essential for language development as individuals will be exposed to different perspectives and peers' comments (H. Zhang, Song, Shen, & Huang, 2014). Along with this process, the researcher believes that students' constructive questioning and their critical comments generated during the online peer interactions could serve as the stimuli of cognitive conflicts for them to co-construct their knowledge and make revision of their written work.

This study acknowledges the role that peer-questioning plays in students' learning. It has been referred to as "peer-generated reactions to others' posted responses that may cause a cognitive discrepancy or evaluation of the initial posted ideas" (Choi et al., 2005, p. 488). According to King (1990), peer-questioning has been applied as a strategy that challenges students to think deeply in order to bridge the gap between their existing knowledge and new perspectives from peers. Building on a peer-questioning support framework proposed by Choi et al. (2005), the constructive peer-questioning in this study included three specific types of questions. The three specific types of questions are presented as 'clarification or elaboration', 'counter-arguments', and 'solution-focused' questions. The examples of these questions, included in the second part of the guidance sheet for peer feedback, aimed to stimulate cognitive conflicts during peer feedback activity.



Apart from applying peer questioning to support the knowledge co-construction, the students should also be encouraged to provide critical feedback in order to create meaningful interactions. The critical feedback in this study referred to

as a feedback that identified problematic areas in peers' written work and might provide suggestion or solution to the problems. According to Y.-F. Yang (2010), cognitive conflicts arise through the process of receiving comments from peers, encouraging them to revise their written works (Y.-F. Yang, 2010, p. 203). However, in the case of Thai learners, they often fail to generate critical feedback that leads to peers' revision due to their lack of experience for assessing writing and their collectivistic culture such as harmonising with social members and avoiding face-threatening situation (Chareonsuk; Thongrin, 2002). In addition, in the context of the English integrated skills course, time constraints do not allow students to generate such detailed and constructive feedback within the class hour.

Stemmed from the need to approach these problematic issues in peer feedback, this research proposes training the students prior to peer feedback (Lam, 2010; Min, 2005, 2006) along with integrating technology through the means of an online platform into the activity. The conceptual model in this study proposes online peer feedback as valuable to the co-construction of knowledge according to these following reasons. First, it allows students to give critical comments by allowing for anonymity. Second, providing online feedback promotes social learning outside of the class.



With respect to the 'critical feedback', bringing technology to peer feedback activity allows peer feedback to be given anonymously. This may potentially affect the quality of the feedback itself. That is, some students do not feel comfortable when commenting on others' work if their identities are known. Nevertheless, online feedback has been recently applied in peer feedback activity, partly as a means to address this problem (Coté, 2014; Lu & Bol, 2007). Lu and Bol (2007), for instance,

found positive effects of anonymous online feedback in terms of promoting students' critical feedback (Lu & Bol, 2007, p. 100). Similarly, Coté (2014) asserted that anonymous reviewers can be more comfortable and provide more honest and constructive comments.

Building on these previous studies, this research suggests providing feedback through the online platform as a way to promote students' critical feedback. As the online platform allows learners to give feedback anonymously, students who tend to give only positive comments and avoid conflict with peers should then be able to provide feedback that points out their peers' errors and make suggestions on how to revise.

The online platform does not only provide students with an opportunity to give comments anonymously, it is also beneficial in terms of eliminating the problem of time constraints. To illustrate, in an English integrated skills course, time is limited, as it has to be devoted to developing all English skills. The integration of an online platform should consequently scaffold the learners by stretching the boundaries of the classroom, allowing them to interact with one another outside of the class. To this point, online peer feedback is necessary for learning as it enables the development of knowledge despite the limitation of time.



In this study, online platform refers to 'Edmodo'. This free online platform serves as a tool for social learning. Through this online platform, students' identities are protected while giving and receiving comments. It also allows them to interact in an asynchronous manner that was advantageous in terms of the flexibility of time and place. That is, with the use of any internet connected devices, the learners have

time to reflect before they can comment and reply to each other outside of the class. This research believes that the application of 'Edmodo' should facilitate students' writing process by allowing them opportunities to generate feedback and make revision along with co-constructing knowledge at their own pace.

## 2.11 Summary

Informing the foundations of the present study, this chapter reviews the relevant studies on constructivism, presenting how learning can occur through the view of Piaget and Vygotsky. This chapter also introduces the importance of peer feedback, including its benefits and challenges. Additionally, this chapter provides the concept of the integration of technology into the peer feedback activity and reviews previous studies relating to how effective training can be organised. In addition, based on previous research, this study suggests that it is important to investigate the interaction during online peer feedback activity in order to provide an understanding of how learning can occur through social support. That is, how students can help one another to improve their written work through the process of social interaction in terms of giving and receiving comments.



*Table 1 Previous studies on peer feedback in writing instruction*

| Author/ Year | Participants | Methods | Findings | Recommendations/ Implications/Own analysis |
|---|---|---|---|---|
| Allen and Mills | Undergraduates (n=54) , foreign language | Quantitative & qualitative analysis; content analysis of | In mixed proficiency dyads, the number of suggestions made | - L2 proficiency should be considered when assigning dyads in peer feedback tasks. That is, |

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| (2016) | writing context | students' comment and revision | was significantly predicted by the proficiency of the reviewer: the low proficiency reviewers are less able to comment on their high proficiency peer's written work. | organising students with peers that differ greatly in their L2 proficiency levels may not be suitable, as the students should be allowed equal opportunity to provide adequate comments.<br>- Since the research did not perform writing tests before and after the course, the extent to which learning can occur in dyads that are of mixed proficiency or matched proficiency can only be hypothesised. |
| Y.-F. Yang and Hsieh (2015) | EFL college students (n=50), 2 groups ;25/groups | Quantitative & qualitative<br>t-test, ANOVA, coding<br><br>CSCL discussion forum system | Less-proficient learners made greater gain in reading comprehension compared to the more proficient learners after using strategy of online peer questioning | Online peer questioning is recommended to enhance less-proficient college students' negotiation of meaning in improving reading comprehension. |

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| Wanchid (2013) | Thai EFL learners (n=90) : 3 experimental groups: self-correction, paper-pencil, & electronic peer feedback | Two-way Analysis of Variance (ANOVA), descriptive statistics, and content analysis. | The students in the electronic peer feedback group performed the best, comparing to the students in self-correction & paper-pencil peer feedback groups. | The levels of L2 proficiency, including cultural context and internet accessibility should be thoroughly explored prior to engaging students to peer feedback tasks. |
| Rahimi (2013) | Iranian EFL learners (n= 56): 2experimental groups: trained & untrained | Experimental design | The trained learners were able to improve their writing and provide feedback with their focus on global comments. | More training sessions and student–teacher conferences should be beneficial in terms of enhancing the expertise of the students as reviewers. |
| Lundstrom and Baker (2009) | Students (n=91), enrolling in writing classes at Brigham Young University. | Experimental design, pre- and post-test : a 30-minute timed essay | The peer-reviewers made more gain that was significant in their writing than the feedback-receivers. The lower proficiency learners made more gain than | Further research should qualitatively investigate the effects of different roles in peer response: the reviewer and the receiver of feedback in order to provide more details on how reviewing text can improve one's own writing. |

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| | | | those with higher proficiency level. | The aspects that students discuss while reviewing and whether the reviewer' improved these same aspects in their own writing should also be examined. |
| Liou and Peng (2009) | EFL undergraduate students (n=13) | Quantitative and qualitative analysis, content analysis; comparisons between drafts | - The learners made more revision-oriented peer comments and had more success in revising their writing. However, less than 50% of their peers' comments were adopted for revision.<br>- Blog-enhanced instruction was found to stimulated students' interest in improving their writing. | The implementation of online peer review outside of the class time can be explored as a way to foster learner autonomy (Liou & Peng, 2009, p. 524)<br>Training should be part of teaching in order to facilitate the integration of technology in language classroom. |
| (N.-F. Liu & Carless, 2006). | Tertiary students (n=1,740) & academics | A large-scale questionnaire survey and interview data | Peer assessment using grades was resisted by Hongkong | An electronic peer feedback should be utilised in combined with face-to-face mode |

| | | | | |
|---|---|---|---|---|
| | (n=460) in Hong Kong | | students. | in order to serve as a two-step procedure that enhances the effectiveness of peer comments. |
| (Storch, 2002) | Adult ESL students (4 pairs) | A case study, pair talk data analysis for the pattern of dyadic interaction<br>and<br>Pre- and post-test: an editing task | Four distinct patterns of dyadic interaction were identified as 'collaborative' (the predominant pattern in this study), 'dominant/dominant, dominant/passive', and 'expert/novice' | Students can support each other to learn when working with their peers in collaborative or expert/novice patterns of interaction.<br><br>Instructors should monitor the pattern of dyadic and group interaction (Storch, 2002, p. 149) |
| Min (2005) | Intermediate EFL, sophomore students (n=18) | Quantitative & qualitative analyses of students<br>comments after training | The students who were trained could generate significantly more comments and provide more relevant and specific comments on global issues. | Further research should compare the number of peer comments that is incorporated into students' revision prior to and post the training for peer response in order to examine the impact of peer feedback on the quality of revision. |

| | | | | |
|---|---|---|---|---|
| Berg (1999) | ESL students (n=46) | Experimental design | The trained peer feedback positively impacted ESL students' revision types and quality of texts. | The research suggests for further studies on how surface-level revisions can affect students' subsequent writing outcomes. |

*Table 2 Related concepts of this study*

| Topic areas | Literature review |
|---|---|
| Social constructivism | Soska and Wolff (2016); Y.-F. Yang (2010); Powell and Kalina (2009); Park (2009); Myles (2002); Vygotsky (1978a); Vygotsky (1994) |
| Cognitive development | McLeod (2009); Daniels (2005); Choi (2002); Tudge and Winterhoff (1993); Damon (1984); Piaget (1953) |
| Peer questioning | Y.-F. Yang and Hsieh (2015); Choi et al. (2005); King (1990) |
| Process-oriented approach | Puengpipattrakul (2014); Berggren (2013); Onozawa (2010); Sun and Feng (2009); Ngame (2006); Krueger (2006); Williams (2004); Matsuda (2003); Badger and White (2000); Lehr (1995) |
| Peer feedback as an assessment for learning in writing instruction | Yu and Lee (2016a); Berggren (2013); Kulsirisawad (2012); Noonkhan (2012); Gielen et al. (2010); Li et al. (2010); Ting and Qian (2010a); Nelson and Schunn (2009); Van der Pol et al. (2008); Wakabayashi (2008); K. Hyland and Hyland (2006); N.-F. Liu and Carless (2006); Nicol and Macfarlane-Dick (2006); M. Yang et al. (2006); Tsui and Ng (2000) |
| Proficiency levels and writing performance | Sotoudehnama and Pilehvari (2016); Allen and Mills (2016); Lundstrom and Baker (2009); Cheng and Warren (2005) |

| | |
|---|---|
| Computer-mediated peer feedback | Zareekbatani (2015); Yuan and Kim (2015); Shams-Abadi et al. (2015);Chang (2012);Liou and Peng (2009); D. Zhang (2009); Wanchid (2007); Shang (2007); Ho and Savignon (2007); Irons (2007); (Lu & Bol, 2007); W.-S. Wu (2006); Sung et al. (2005); Tuzi (2004); J. Liu and Sadler (2003); DiGiovanni and Nagaswami (2001) |
| Challenges in peer review | Badjadi (2013); N.-F. Liu and Carless (2006); Liou and Peng (2009) |
| Training studies | Berg (1999); Rollinson (2005), Hansen and Liu (2005); Lam (2010) |

# CHAPTER 3

# METHODOLOGY

This study explores online peer feedback of Thai first-year undergraduate students who enrolled in an English integrated skills course II. It aimed to shed light on how the students provided feedback and revised their writing during the online peer feedback tasks. Moreover, students' attitudes toward the intensive peer feedback training and the electronic peer feedback were investigated. This chapter presents the methods applied in this study, including research design, population and samples, description of research instruments, and the procedures of data collection and data analysis.

## 3.1 Research questions

This study aimed to find answers to the following questions:

1. What are the patterns of interaction during peer feedback sessions between student pairs?
2. What effect does the electronic peer feedback have on the outcomes of students' writing?
3. What are the students' attitudes toward the intensive peer feedback training and the electronic peer feedback?

## 3.2 Research design

This mixed-methods study, using both quantitative and qualitative methods, aimed to investigate the interaction during online peer feedback activity and to provide descriptions of students' abilities in giving online peer feedback and making revision of their writing. The intensive peer feedback training in this research was not an intervention of an experiment. The study aimed to neither control for variables nor compare between two groups of students. It did, however, serve as an orientation to provide students with introductory guidelines on how to generate useful feedback prior to the online peer feedback activity. Building on the objectives of the study, the data were collected and analysed using both qualitative and quantitative approaches, namely descriptive statistics, and content analysis.

*Table 3 Stages of the research*

| Stages | Objectives |
|---|---|
| Stage 1: Development & validation of the research instruments | To provide valid and reliable instruments used to collect data for this study. |
| Stage 2: Pilot study | To ensure reliability of the validated instruments, they were tried out with twenty-eight first year undergraduate students who enrolled in the Experiential English course I (the 1st semester of 2018 academic year). The pilot study lasted fourteen weeks; it was conducted in the first semester prior to the data collection. The online platform for peer feedback – Edmodo was tried out during this stage. The two raters were the researcher and a teacher who taught the same course. Nine research instruments were as follows:<br>1) an English writing proficiency test<br>2) an English writing assessment rubric |

| | |
|---|---|
| | 3) two writing tasks<br>4) a grid for feedback analysis<br>5) a grid for revision analysis<br>6) a grid for interaction patterns analysis<br>7) a grid for peer-questioning analysis<br>8) an online attitude questionnaire<br>9) semi-structured interview questions. (Details are included in the research instruments part.) |
| Stage 3: Data collection | Students' data were collected during fourteen weeks following the Experiential English course in the second semester of 2018 academic year. Data were retrieved from several sources as follows: (1) an English writing proficiency test, (2) online peer feedback sessions, (3) students' essays, (5) an online attitude questionnaire, and (6) a semi-structured interview. |
| Stage 4: Data analysis | Please refer to table 3.5 regarding the information on the data analysis. The table is included at the end of the next section. |



## 3.3 Population and samples

The population of this study was Thai first-year undergraduate students who were studying in the Faculty of Education. They were both male (*n* =152) and female (*n* =279), 18-20 years of age (431 students in total). The students' English proficiency levels were varied as they entered the university from different Thai high schools. This study was conducted in a 14-week English integrated skills course which met

once a week for three hours as part of the university requirement. The aim of the course was for students to be able to communicate using the four language skills.

The samples of this study were 30 first-year-Thai undergraduate, enrolling in an English integrated skills course II[1] (male =12, female =18). They had fifteen years' experience study English language in Thailand prior to university. None of them had experienced peer feedback prior to this course. The samplings came in an intact group that had been assigned by the university. Samples' writing proficiency level were classified according to an English writing proficiency test[2] into three levels: low (*n* =19), intermediate (*n* =6), and high (*n* =5). Student pairs could be stratified into six combinations according to their writing proficiency level as follows: 1. High-Intermediate (n= 2), 2. High-Low (n= 1), 3. Intermediate-Low (n= 2), 4. High-High (n= 1), 5. Intermediate-Intermediate (n= 1), and 6. Low-Low (n= 8).

## 3.4 Research instruments

The study utilised nine research instruments for data collection and data analysis. The research instruments are as follows: (1) an English writing proficiency test, (2) an English writing assessment rubric, (3) two writing tasks, (4) a grid for feedback analysis, (5) a grid for revision analysis, (6) a grid for interaction patterns analysis, (7) a grid for peer-questioning analysis, (8) an online attitude questionnaire, and (9) semi-structured interview questions.



[1] An English integrated skills course is a compulsory course for first-year undergraduate students to practice in the four language skills: reading, listening, speaking, and writing for everyday communication.

[2] An essay test designed to measure ability in writing. The classification of students' proficiency levels was based on a revised TOEFL paper-delivered test scored for July 2017 or later https://www.ets.org/toefl/institutions/scores/interpret/.

In consideration of ethical issues, the researcher explained the study's objective and requirements prior to data collection. A consent form was distributed to students to obtain permission to use their information for research purposes and to ensure that the learners were willing to participate in the study.

**Descriptions of research instruments**

**3.4.1 An English writing proficiency test (Appendix A)**

The English writing proficiency test was a written essay designed with the aim to measure students' writing ability. It aimed to place the samples into proficiency levels according to their writing abilities. The written essay was used as it has been regarded as the best way to measure productive skills compared to other types of writing assessments in terms of manifesting students' writing ability rather than the knowledge of isolated language elements. The researcher followed a guiding workbook (Reiner, Bothell, Sudweeks, and Wood (2002) to prepare the essay prompt.

The English writing proficiency test was tried out with the twenty-eight students to ensure that the essay topic was comprehensible to the test takers and that the time required for completing the test was appropriate. Three essay topics were selected from an Official guide to the TOEFL Test, 4th Edition based on a personal topic which did not require students' specialised background knowledge. To ensure the validity of test, the three topics and the description of the test takers along with the objective of the test were then given to experts to select the most suitable topic for the test.

The three essay topics are shown below.

1. You have the opportunity to visit a foreign country for two weeks. Which country would you like to visit? Use specific reasons and details to explain your choice.
2. Do you agree or disagree with the following statement: grades encourage students to learn? Use specific reasons and examples to support your opinion.
3. In general, people are living longer now. Discuss the causes of this phenomenon. Use specific reasons and details to develop your essay.

Topic number two was chosen by five experts who are in the field of writing instruction because it was regarded as accessible to all the test takers who had just graduated from their high schools and were currently enrolling in the university (Appendix A).

**3.4.2 An English writing assessment rubric (Appendix B)**

The rubric was designed to measure students' writing English proficiency levels and to investigate the quality of students' writing between drafts. It was adapted from the English writing rubric used in the required course. The English writing assessment rubric emphasised both grammar and content; it comprised of four criteria: grammar, vocabulary, organisation, and idea/content and divided into five levels. All components made up the overall score of 20 (100%).

Validity and reliability of the writing rubric were tested during the pilot study. The validity of the rubric was established through the process of having five experts in the field of writing instruction examine the correctness and appropriateness

between the objective and the content of rubric. The collected scores from five experts were analysed for the item objective congruence (*IOC*) which was 0.86

In the pilot study, students' essays were independently rated to establish consistency of the scores given by two raters. A spearman's rank-order correlation illustrated a very strong, positive correlation between students' writing scores given by the two raters which was statistically significant ($r_s$= .961, $p$ < .01). After the pilot study, the researcher discussed with the second rater and refined the rubric by including 'mechanics' in the grammar categorisation. The consistency of scores given by two raters during the main study was established at ($r_s$= .848, $p$ < .01).

**3.4.3 English writing tasks (Appendix C)**

The first-year undergraduate students in this study were required to write a persuasive essay and a problem-solution essay as the requirement for the English experiential course II. They completed four essay tasks (two tasks for each essay type). The first and the third writing tasks were used as the training material while students' essays from the tasks two and four were collected as data for the analysis.

The writing tasks involved a four-paragraph essay, consisting of the introduction part, the content (2 paragraphs), and the conclusion paragraph. In the first task (persuasive essay), the students had to provide two convincing reasons to support the essay topic. They had to come up with relevant supporting details for their chosen reasons. In the second task (problem-solution essay), the students were presented with two problems included in each essay topic. They had to provide two

solutions for the problem given with appropriate supporting details. Both writing tasks were equally assessed in terms of grammar, vocabulary, content, and organisation.

### 3.4.4 A grid for feedback analysis (Appendix D)

A grid for feedback analysis was adapted from Liu & Sadler (2003). It focused on students' global and local areas of comments. The global area included audience, purpose, idea development, and organisation while the local area involved copy-editing such as grammar and punctuation. The current research also classified feedback in terms of local and global areas of comments by specifically focusing on idea/content, organisation, grammar, and vocabulary. The grid for analysing feedback in this study also involved the categorisation of the nature of feedback: revision-oriented and non-revision-oriented[3]. Additionally, the analysis grid also addressed the quality of peer comments[4].

Validity and reliability of the instrument were tested during the pilot study. With respect to the validation, five experts in the field of writing instruction and assessment commented on the research instrument in relation to its content. The collected scores for the item objective congruence (*IOC*) were 0.89, with a minimum of 0.70 deemed appropriate for the validity of the instrument in this study. As for the reliability, the definition of each categorisation was given in order to maintain

[3] Revision-oriented feedback: suggestions, recommendations, and/or questions that may lead to revision in the writer's subsequent draft. Non revision-oriented: compliments that do not lead to revision in the writer's subsequent draft.

[4] Good: correct assessment and some suggestions on how to improve peers' written work. Satisfactory: correct assessment and/or some suggestions. Unsatisfactory: incorrect assessment with no further suggestions given or questions asked.

consistency in its application regardless of who the rater was or when the rating was processed (Moskal & Leydens, 2000, p. 4). The grid was then piloted and tried out before it was used to collect data. The objective of the pilot study was to determine the reliability of the feedback analysis grid within the context of an English integrated skills course II and to discover if any changes had to be made. During the pilot study and the main study, inter-coder reliability between the researcher and the second coder who was the teacher in the course was calculated at one hundred percent after the few discrepancies between raters were resolved.

### 3.4.5 A grid for revision analysis (Appendix E)

The revision analysis grid used for analysing students' revisions was adapted from previous research (Faigley & Witte, 1981; Ting & Qian, 2010a; Yu & Lee, 2016b). The revision analysis grid included the analysis of changes between students' drafts according to their types, operations (Faigley & Witte, 1981), initiators (Ting & Qian, 2010a), and quality (Yu & Lee, 2016b) of revisions. This study analysed students' revisions based on these revision frameworks as they were considered as suitable for the objective of this research that aimed to explore the types of revision, how they were made, and whether they had quality (Appendix H).



The types of revision were identified in relation to students' feedback: grammar, vocabulary, organisation, and content development. The research further examined how students revised (operation): re-ordered, added, deleted, and substituted. Moreover, with this grid, the researcher also explored the source of students' revision (self or peer) and its quality with respect to its impact on their writing.

In consideration of the validation of research instrument, five experts in the field of writing instruction and assessment were asked to validate a grid for revision analysis. The collected scores for the item objective congruence (*IOC*) were 0.88 with a minimum of IOC, 0.7 deemed appropriate. The research instrument was then piloted and tried out with students' revisions before it was used to collect data. The researcher and the teacher who taught the same course independently investigated students' revisions to combat with subjectivity in the analysis. The internal consistency was achieved at one hundred percent after the few discrepancies between raters were resolved during the pilot stage and the main study.

**3.4.6 A grid for interaction patterns analysis (Appendix F)**

The categories of interaction patterns adapted from (Roberson, 2014; Storch, 2002) were used to examine students' interaction during online peer feedback activity in order to categorise how students interact during online peer feedback tasks. They were classified according to the extent of learners' engagement with peers' comments as 1) collaborative, 2) dominant/dominant, 3) dominant/passive, 4) expert/novice, and 5) expert/passive. Please refer to Appendix F for the description of each categorisation.



The instrument was piloted and tried out before it was used to collect data. The researcher adapted the classification of interaction by adding 'expert/passive' pattern to the analysis because the student writer failed to interact even when the student reviewer provided feedback and used question to encourage peer interaction. To illustrate, the student reviewer provided direct suggestion but there was a failure in negotiation for meaning due to the lack of participation from the

student writer. The researcher and the same second coder independently analysed students' interactions. The inter-rater reliability was obtained at one hundred percent after the discrepancies of the coding were solved by re-reading students' interactions along with discussing the coding descriptor with the second coder.

**3.4.7 A grid for peer-questioning analysis (Appendix G)**

The categories of peer questioning patterns were used to provide an understanding of students' questioning behaviour during the interactions in online peer feedback tasks. The categories of peer questioning were based on the questioning strategies included in the training materials. The three questioning categories included questions of 1) clarification or elaboration, 2) counter-arguments, and 3) solution-focused questions. The rationale for basing a grid for peer-questioning analysis on these three questioning strategies was because they were in accordance with the objective of this study that aimed to encourage students' interaction during peer feedback activities. These three types were adapted from Choi et al. (2005). Clarification question was for clarifying writers' intentions, counter-arguments question was to express disagreement with writers' ideas and make specific suggestions, and solution-focused question was for identifying and explaining problems.



The instrument was piloted and tried out with students' peer questioning before it was used to collect data. The aim of piloting the instrument was to investigate its appropriateness in the data collection. As for the implementation of peer-questioning categories, students' online interactions were printed out. The researcher and the second coder who taught the same course independently

analysed students' online interactions to identify the patterns of peer questioning. The inter-rater reliability was obtained at one hundred percent after the discrepancies of the coding were solved by re-reading students' questions along with discussing the coding descriptor with the second coder during the pilot study and the main study.

**3.4.8 An online attitude questionnaire (Appendix H)**

An online attitude questionnaire aimed to elicit the information on students' opinions toward electronic peer feedback and intensive peer feedback training. Taking into consideration of the relevancy of content and objective in this study, the questionnaire consisted of closed-ended questions, involving twenty statements in a Likert-scale multiple choice question format. The students had to select the degree of their agreement and disagreement with the statements given 1= Strongly disagree, 2= disagree, 3= no strong feelings, 4= agree, and 5 = strongly agree.

The implementation of the online attitude questionnaire was administered by using a link that was sent via students' personal e-mail. It connected them to a specific questionnaire page that was created by the researcher. The questionnaire comprised of five choices, prompting students to choose whether they agree or disagree with the statements provided.



With respect to the content validity of the question items, relying on the knowledge of five subject matter experts, who were in the field of writing instruction and assessment, they were asked to comment on each item about how well each statement measured or taped into students' attitudes toward electronic peer feedback and intensive peer feedback training. The collected scores for the item objective congruence (IOC) were 0.90 (English version) and 0.70 (Thai version) with a

minimum of 0.70 deemed appropriate (Appendix C). The researcher then analysed their comments that informed the effectiveness of each statement in the questionnaire. Additionally, three teachers, who were responsible for this course, were asked to read the questionnaire to improve its quality in terms of the clarity and the comprehensibility of questions. This also aimed to obtain information on the format, the clarity and the relevancy of questions, and the amount of time required to fill out the questionnaire (Seliger & Shohamy, 1989, p. 173). Consequently, the questionnaire was revised according to the experts' suggestions.

The final step in designing the attitude questionnaire was to measure how well the question items function together and to ensure clarity and relevance of questions, the format, and the amount of time required to answer the questions. To achieve this, the online attitude questionnaire was piloted with twenty-eight undergraduate students. The data was analysed using SPSS (Statistical Package for Social Sciences). The acceptable reliability coefficient (alpha) of 0.70 or higher was deemed as appropriate for the reliability of the questionnaire. Cronbach's alpha coefficient of 0.793 for pilot study and 0.879 for the main study were obtained which indicated a high level of internal consistency for the scale.



**3.4.9 Semi-structured interview (Appendix I)**

A semi-structured interview was used to gain more insight into students' attitude towards peer feedback training and online peer feedback activities. With respect to the validation of the instrument, the same five experts were asked to validate the interview questions. Moreover, to check if the students experienced

ambiguities while interpreting interview questions. The questions were tried out with five students prior to the main study. The interview question number five regarding students' English writing proficiency was then included after the pilot study.

*Table 4 Summary of research instruments*

| **Instruments** | **Objectives** | **Characteristics** | **Distribution time** | **Validity checks** | **Reliability checks** |
|---|---|---|---|---|---|
| 1. Writing proficiency test | To categorise students into writing ability levels | A timely essay | Prior to online peer feedback | All instruments were evaluated, revised, tried out during the pilot study, and revised another time prior to implementing during main study | Inter-rater $r_s$= .961, $p$ < .01 |
| 2. An English writing assessment rubric | To rate subjects' writing performance | Analytical measuring four main components | Used for rating students' essay prior to online peer feedback & 1st and 2nd drafts of both writing tasks | | |
| 3. English writing tasks | To collect students' data on their writing scores in order to compare the improvement between | An essay task | Used for collecting students' writing data on their second and fourth tasks. | | Inter-rater $r_s$= .914, $p$ < .01 |

| | | | | | |
|---|---|---|---|---|---|
| | writing drafts | | | | |
| 4. A Grid for Feedback Analysis | To categorise students' feedback | A grid with descriptors | Used for analyzing feedback regarding areas, nature, and quality | | Percent of agreement |
| 5. A Grid for Revision Analysis | To categorise students' revisions | A grid with descriptors | Used for analyzing revisions in terms of types, operations, and quality | | Percent of agreement |
| 6. A Grid for Interaction Patterns Analysis | To categorise students' interaction | A grid with descriptors | Used for analyzing interaction during online peer feedback | | Percent of agreement |
| 7. A Grid for Peer-questioning Analysis | To categorise students 'questions | A grid with descriptors | Used for analyzing peer-questioning | | |

| | | | | | |
|---|---|---|---|---|---|
| 8. An Online Attitude Questionnaire | To elicit students' opinion in online peer feedback and peer feedback training | 5-point Likert scales; open-ended questions | Immediately after online peer feedback | | Cronbach's alpha coefficient = 0.793 |
| 9. Semi-Structured Interview Questions | To elicit information on students' online peer feedback | Semi-structured | After the students have taken online and training form peer feedback | | N/A |

## 3.5 Data collection

The data collection was carried out throughout the semester with intensive training provided prior to the peer feedback activities. Table 5 shows the data collection procedures taking place within the semester.

*Table 5 Data collection process*

| Week | Data collection |
|---|---|
| 1 | Administration of writing proficiency test to place students into writing proficiency levels |
| 2 | Introduction to the persuasive essay and the online platform 'Edmodo'<br>Submission of writing task one within the same week via e-mail |
| 3 | Peer feedback training<br>- In-class practice included identifying problems and providing feedback on |

| | |
|---|---|
| | writing samples of students from the previous semester.<br>- The first writing assignment was used as training material for students to identify errors and provide feedback in class.<br>- After the students had read peer feedback on the first writing task, they then received teacher's feedback. During this stage, the participants discussed feedback with the instructor. They submitted the second draft of writing task one within the same week. |
| 4 | Written drafts of writing task two were collected from www.edmodo.com. |
| 5 | Collection of peer feedback and interaction patterns of writing task two |
| 6 | Collection of revised drafts of writing task two |
| 7 | Teacher's feedback on writing task two in class |
| 8 | Mid-term examination |
| 9 | Introduction to the problem-solution essay<br>Submission of writing task three within the same week via e-mail |
| 10 | Peer feedback training |
| 11 | Written drafts of writing task four were collected through www.edmodo.com. |
| 12 | Collection of peer feedback and interaction patterns of writing task four |
| 13 | Collection of revised drafts of writing task four |
| 14 | Teacher's feedback on writing task four in class<br>Administration of online attitude questionnaire and semi-structured interviews |



### 3.5.1 Administration of English writing proficiency test

The English writing proficiency test was administered during the first week, to collect students' information on their levels of proficiency. The objectives of this research were explained to the students during the first two hours of the first meeting, after the researcher had finished clarifying the syllabus and ice-breaker

activities. The researcher then obtained permission from the participants before collecting their information regarding their English writing proficiency levels. The test, which required the participants to write an essay, was then administered for one hour. Data on thirty students' writing were gathered and photocopied. The researcher and the teacher in the same course then rated students' writing independently using an English writing assessment rubric. The total score ranged from 0 to 20 was used to classify students into to their English writing proficiency levels based on the criteria of a revised TOEFL paper-delivered test: high = 16-20, intermediate= 11-15, and low= 0-10. The researcher then organised students into dyads for online peer feedback. Student pairs were stratified into six combinations according to their English proficiency levels as follows: 1. High-Intermediate (n= 2), 2. High-Low (n= 1), 3. Intermediate-Low (n= 2), 4. High (n= 1), 5. Intermediate (n= 1), and 6. Low-Low (n= 8).

**3.5.2 The intensive training for peer feedback**

Based on previous training studies (Lam, 2010; Min, 2005, 2006), the intensive peer feedback training integrated in the Experiential English course included a four-step procedure instructing students on how to provide constructive feedback to peers: 1) clarifying writer's intentions, 2) identifying problematic areas, 3) explaining and describing the nature of the problem, and 4) giving suggestions for modifications.

In the Experiential English course that aims to develop students' four skills of English, students meet once three hours per week for a total of 14-week semester. Due to the lesson plan, the training for peer feedback in this study had to be

intensive. The training covered two training sessions in two weeks before the second writing assignments of the persuasive essay and the problem-solution essay.

Week 3 and week 10 (1 hour and 30 minutes lesson plan):

*Table 6 Peer feedback intensive training lesson plan*

| Steps | Activity | Material |
|---|---|---|
| 1. | Teacher introduced the concept of writing process and the characteristics of good writing. | English writing assessment rubric |
| 2. | - Teacher explained the notion of peer feedback as part of the writing process along with its benefits and objectives.<br>- Teacher addressed how feedback should be provided by describing the four steps relating to clarifying writer' attention, identifying errors, explaining the problem, and suggesting solution on how the writer should revise their work (Min, 2006). | The guidance sheet for peer feedback |
| 3. | Presentation of the online platform 'Edmodo' through class demonstration.<br>The training for peer feedback took one hour and a half for three hands-on practice tasks:<br>1. Introduction to the objectives of the training that aimed to equip students with commenting skills and to enhance their ability to provide constructive feedback on peers' writing.<br>2. Modeling:<br>- Teacher distributed the training materials and demonstrated how to apply them to clarify the writer's intentions by the use of questioning | - www.edmodo.com<br>- The guidance sheet for peer feedback |

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| | and reasoning.<br>- Teacher used writing samples for class discussion; the students exchanged their ideas and made specific suggestion. | |
| 4. | Application of the training materials in the Experiential English course.<br><br>Task I (15-20 minutes): students studied the English writing assessment rubric and individually identified errors in the writing samples by focusing on the area of content, idea organisation, and logical of arguments. They were free to make changes and revise the writing samples, noting down the justification of their revision in their first language.<br><br>Task II (15 minutes): students studied the guidance sheet involving a four-step procedure. They read and identified problem of the feedback provided by the students from the previous semester.<br><br>Task III (20 minutes): in pairs, learners used the guiding questions for assessing peers' writing adapted from (Lam, 2010; Min, 2006) to make comment on the writing samples. They tried to replace vague comments such as those that simply presented praise statements with critical feedback. They were reminded that the critical or constructive feedback should prompt further explanation (asking the writers to clarify their | Material for hands-on practice 1: the English writing assessment rubric, and the writing samples of students from the previous semester<br><br>Material for hands-on practice 2: the guidance sheet for giving effective feedback and the examples of feedback on the same writing samples of task I, generated by the students from the previous semester<br><br>Material for hands-on practice 3: the guidance sheet for peer feedback and the writing samples of students from the previous semester |

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| | | intention), identify problem (searching for problematic areas), explain the nature of problem (justifying unclear parts), provide specific suggestions for further modifications (illustrating ways to change or revise the writing) (Lam, 2010; Min, 2005).<br><br>After the learners had completed the task, they presented and shared their own comments, including alternative feedback that had been discussed in pairs for class discussion. At the end of the training session, instructor wrapped up the activities by commenting on students' feedback presented in class, pointing out the characteristic of good and vague comments to the learners.<br><br>Task IV (20 minutes): students practice giving comments on their peers' writing (task 1 and 3). During this process, the students were encouraged to apply questioning strategies adapted from (Choi et al., 2005; Lam, 2010; Xun & Land, 2004) to practice generating questions while commenting on the writing samples. | Material for hands-on practice 4: the English writing assessment rubric, the guidance sheet for peer feedback, and the writing samples of students in the current study (Appendix C) |

**3.5.3 Online peer feedback sessions**

During two online peer feedback sessions, three sets of data were collected, namely the peer feedback students gave to each other, the types of peer questioning and the interaction patterns. Students' online feedback of two writing assignments was collected on two different essay genres. During the second week of

the Experiential English course, the students were instructed to sign up for Edmodo with their pseudonyms that were later submitted to the researcher within the same week. In class, they were given a class code to join a group created by the researcher. The course required the students to write two types of essays: a persuasive essay and a problem-solution essay. The learners had to submit two assignments for each type of essay. The second assignment of the two essays were submitted via Edmodo and collected as data for analysis while the first assignment was used as a training for peer feedback. The data then comprised of two sets of feedback on two writing assignments: one set of feedback for the persuasive essay and another set of peer feedback for the problem solution essay.

To investigate the patterns of online interaction, data on students' online interactions were obtained from two online feedback sessions. Thirty students' online interactions of two writing assignments were recorded by print screen. The data comprised of two sets of students' interactions in this phrase. The researcher used print screen to retrieve sixty students' online interactions and recorded the data as photo in Microsoft word before printing them out for analysis.



To examine how students provided questions during online peer feedback tasks, data were collected from students' online interaction of two online sessions. Data were retrieved from the source of online peer feedback that comprised of two sets of students' interactions.

### 3.5.4 Students' revision

To understand how students improved their writing, data regarding the quality of students' revisions were obtained from the first and second drafts of each type of

essay. After participants revised their writing, they were asked to highlight the changes and submit the second drafts of both essays via the researcher's e-mail. Students' first drafts were submitted via two online feedback sessions on Edmodo and their second drafts were submitted via e-mail. To investigate and compare the changes made between drafts. Sixty drafts for each type of essay were then printed out for analysis.

### 3.5.5 Online attitude questionnaire

The online attitude questionnaire provided a data source on students' attitude towards online peer feedback and the intensive training for peer feedback. In the last week of the course, after the students had finished all online peer feedback sessions and had submitted their final drafts to the instructor, the researcher obtained information on students' attitude by sending a questionnaire link to their personal e-mail. Thirty students' responses were collected as data for analysis. They were reassured that their response would be anonymous and confidential.



### 3.5.6 Semi-structured interview

The semi-structured interview provided an additional data source to the online attitude questionnaire. Twelve students were selected for the interview based on their English proficiency level to make sure all six combinations: 1. high-high, 2. high-low, 3. high-intermediate, 4. intermediate-low, 5. high-high, and 6. Intermediate-intermediate were included. The interview was conducted outside of class time in the same week of the administration of the online attitude questionnaire.

## 3.6 Data analysis

Data analysis was guided by the research questions that provided a framework for this study.

**Research questions:**

### 3.6.1 What are the patterns of interaction during peer feedback sessions between student pairs?

The content analysis was conducted to classify students' online interactions during two peer feedback sessions according to the patterns of interaction scheme adapted from Storch's (2002) analytical framework which analyses patterns of interaction based on 1. Mutuality - the extent to which students engage with each other's idea and 2. Equality - the extent to which they share control over the direction of the task (Roberson, 2014; Storch, 2002) (See Chapter Two for explanation). The feature of students' patterns of interaction in this research was based on those found in Storch's (2002) and Roberson's (2014) studies in terms of the categorisation. The expert/passive category was added to the grid for interaction analysis after the pilot study.



Sixty patterns of interaction were identified in the current study as there were two writing tasks and fifteen pairs, (two writing tasks times fifteen pairs, with two writings per pair). To analyse students' interactions during two online peer feedback tasks, their interactions were divided into topics because the participants did not discuss only on one topic during their interactions. Several patterns of interaction were assigned for various topic discussed during peer feedback. Therefore, to assign a single interaction pattern, this study used Roberson's (2014) analysis method that assigned the interaction patterns based on those that presented seventy-five percent of the topics discussed in each task. To illustrate, the interaction patterns had to

present at least seventy-five percent of the episodes in order to be assigned a single pattern of interaction for each student.

At the end of the course, the researcher printed out two sets of students' data and identified the patterns of interaction. A second rater who was the teacher in the same course also coded the data. An overview of the research's objectives and each categorisation in the interaction patterns scheme were provided during this stage. To ensure comprehensibility of the rating, three examples of students' online interaction were used to code at this stage. The inter-coder reliability was achieved at one hundred percent of agreement after the discrepancies between the researcher and the second coder were solved by re-reading students' interaction and discussing the categorisation of the interaction scheme.

**3.6.2 What effect does electronic peer feedback have on the outcomes of students' writing?**

Both quantitative and qualitative analysis were used in this procedure. First, sixty drafts were rated in this phase: students' first and second drafts of fifteen pairs for each writing assignment. The researcher used the rubric adapted from the writing assessment rubric in the course to score students' first and second drafts. They were then given to the second rater who taught the same course. Prior to the rating process, I explained the objective of conducting this research and had her assign scores on three writing samples to check comprehensibility when using the rubric. The scores given on the writing samples between the second rater and the researcher were then compared. They were discussed to ensure the consistency between raters. To provide an overall improvement between students' first and second drafts, the scores obtained from both raters were analysed by paired t-test.

Inter-rater was achieved by conducting a spearman's rank-order correlation ($r_s$= .914, $p$ < .01).

The qualitative analysis involved analysing students' feedback during online interaction and their revisions between drafts to gain insight into how online peer feedback could lead to the improvement in students' writing outcomes. The researcher printed out sixty interactions and used the grid for feedback analysis to classify students' comments in terms of areas (grammar, vocabulary, content, and organisation) and its quality, and to identify whether the feedback given was revision-oriented or non revision-oriented.

The content analysis was used for revision analysis to compare the first and second drafts of both writing assignments. All changes were underlined on all sixty drafts. The grid for revision analysis was then used to classify students' revisions into types according to the areas of feedback. The researcher further identified how revisions were made (deletion, addition, substitution), whether they were caused by peer feedback or students themselves, and whether revisions had quality or not. After the grid for feedback and revision analysis was completed, the same coder practiced with the researcher to classify feedback and revisions on three writing. Inter-coder reliability was calculated at one hundred percent after the researcher discussed and resolved the few discrepancies with the second coder.

**3.6.3 What are the students' attitudes toward intensive peer feedback training and electronic peer feedback?**

Students' attitudes toward electronic peer feedback and intensive peer feedback training were investigated using online questionnaire and semi-structure

interview. Thirty students' responses to twenty questions were submitted online via google form. The researcher obtained data on a spreadsheet for the analysis.

The criteria of the questionnaire were set prior to the analysis to interpret the data. The data were interpreted as follows:

1 = strongly disagree (1.0-1.49)

2 = disagree (1.5-2.49)

3 = agree (2.5-3.49)

4 = strongly agree (3.5-4.0)

To shed more light on students' attitude, the data obtained from twelve participants in semi-structure interview were analysed. The researcher first transcribed the interview data into twelve transcriptions and took notes to describe the content before assigning themes. In the data analysis, the researcher and the teacher who taught the same course individually read students' transcripts and assigned data into categories before comparing similarities and differences that described content together. In the process of validation, the emerged themes were reviewed. The researcher and the second coder re-read the data, double-checking for consistency to ensure that the data were free from bias and had not been misinterpreted.

Table 7 below illustrates a summary of the objectives of this study, explaining the research instruments, their purposes, and data analysis.

*Table 7 Research instruments and data analysis*

| **Research questions** | **Instruments** | **Data** | **Collection procedures** | **Method of analysis** |
|---|---|---|---|---|
| **1.** What are the patterns of interaction during peer feedback sessions between student pairs? | Patterns of interaction categories (Storch, 2002) | Qualitative and quantitative patterns of interaction classification | Collection of online interaction | - Qualitative: content analysis for patterns of interaction<br>- Quantitative: frequency counts, percentages |
| **2.** What effect does electronic peer feedback have on the outcomes of students' writing? | (1.1) English proficiency test<br>(1.2) English writing assessment rubric<br>(1.3) English essay tasks<br>(1.4) Grid for feedback analysis<br>(1.5) Grid for revision analysis | (1.1-1.3) Quantitative writing scores<br>(1.4) Qualitative and quantitative peer feedback classification<br>(1.5) Qualitative and quantitative students' revisions classification | (1.1-1.3) Test administration<br>(1.4) Peer feedback administration<br>(1.5) Collection of second written drafts of two writing assignments | (1.1-1.3) Qualitative: Descriptive statistic: paired samples t-test<br>(1.4- 1.5)<br>- Qualitative: content analysis for peer feedback and revisions<br>- Quantitative: frequency counts, percentages |

| | | | | |
|---|---|---|---|---|
| 3. What are the students' attitudes toward intensive peer feedback training and electronic peer feedback? | (3.1) Online Attitude Questionnaire (OAQ)<br><br>(3.2) semi-structure interview | (3.1) Quantitative five point-Likert scale<br><br>(3.2) Qualitative interview answers | (3.1) Attitude questionnaire administration<br><br>(3.2) Semi-structured interview | 3.1) Quantitative:<br><br>Percentage, mean, and standard deviation<br><br>(3.2) Qualitative:<br><br>Content analysis for interview answers |

## 3.7 Summary

With the aim to shed light on the students' writing process, regarding online interaction during peer feedback activities, this chapter summarises research methodology, describing research questions, population, and sample. It provides information on nine research instruments and illustrates the process of how data were collected and analysed. The quantitative analysis involved using paired sample t-test, descriptive statistic - percentages. The qualitative included the content analysis providing more detail regarding students' interaction.

# CHAPTER 4

# FINDINGS

The previous chapter describes the methods used to analyse each data source. The next two chapters will report and discuss results for three main research questions: (1) what are the patterns of interaction during peer feedback sessions between student pairs? (2) what effect does the electronic peer feedback have on the outcomes of students' writing? (3) what are the students' attitudes toward intensive peer feedback training and electronic peer feedback? Results were obtained from fifteen pairs of participants including two drafts each for two writing assignments, making up sixty patterns of interactions. In addition, students' attitudes on the peer feedback training and the online peer feedback were explored using online questionnaire.



**Addressing Research Questions:**

## 4.1 What are the patterns of interaction during peer feedback sessions between student pairs?

The number of instances of students' interaction patterns that were identified during online peer feedback sessions for two writing assignments will be first reported. The results that describe each online interaction pattern of students pairing will then be presented qualitatively to shed more light on how proficiency could

have an implication regarding online interaction patterns during peer feedback activity.

### 4.1.1 Number of stances of interaction patterns

The data analysed included two sessions of online peer feedback for two writing assignments. There were thirty participants; their interaction patterns were analysed for each session. Five interaction patterns could be identified from the data in this study. Students' interactions involved these following patterns: collaborative, expert/novice, expert/passive, dominant/dominant, and dominant/passive.

*Table 8 Interaction patterns identified during two sessions of peer feedback*

| Pattern | Feature |
|---|---|
| Collaborative | Students writer and/or reviewer asked for clarification and/or discuss optional revisions. Student writers admitted failure and/or reached consensus on how to revise. Student writers might point out error in peer feedback. |
| Expert /Novice | Student reviewers provided suggestions. They did not try to dominate the interaction. Questions might be used to engage student writers into revision. Student writers admitted their error( s) and/ or misunderstanding(s). |
| Expert/Passive | Student reviewers provided direct suggestions. They did not try to dominate the interaction but there was a lack of participation from student writers. |
| Dominant /Dominant | Students insisted on own opinion; they did not agree with each other's ideas. |
| Dominant/Passive | Student reviewers provided suggestion with little or no effort in engaging student writers into activity. There was a lack of participation from student writers. |

*Note:* Interaction patterns for analysis were adapted from Roberson (2014) and Storch (2002). The pattern of expert/passive was added into this classification according to the data for analysis.

*4.1.1.1 Collaborative pattern*

Students who were identified under the collaborative pattern asked for clarification of peer comments and/ or discussed optional revisions together. The collaborative student writer admitted his/ her error, agreed to make changes according to peer feedback. He or she pointed out errors in peer comments. The excerpt below illustrates a collaborative pattern of interaction in which the student reviewer and the student writer were engaged with each other's ideas.

*Excerpt 1 (Collaborative)*

Pak's feedback on Jai i's persuasive essay about word redundancy and the use of conjunction:

Pak: Hi,

#1 Intro: the first two sentences can be combined because both are about toxic gas. #2 When they were written separately, it is a bit redundant.

#3 1st paragraph: it is too repetitive to use the same word ' private vehicles' , so you may use another word such as personal car. #4 Still, some words are spoken language, ex. so on, a good idea.

#5 2nd paragraph: 'because' should be used to connect two sentences but you had only one sentence here. #6 You may add one more sentence, ex. ' Trees help reduce toxic gas because… .' #7 Or you may combine your following sentence with the one before it.

#8 Your conclusion paragraph is already good but there is grammatical error in the last sentence of your conclusion, ex. “s” in subject and verb agreement and the use of tense.

#9 Overall, too many redundant vocabularies, you should use substitution or pronoun. #10 You may use ‘them’ to replace private vehicles. #11 Another point is you can combine some sentences so you don’t have to write them separately.

Jai i.: #12 Ok but, I searched about the use of ‘so on’ and found that it can be used in both spoken and written language. #13 Plus, ‘a good idea’ is in the book’ so I think it’s ok to use? #14 As for the 2nd paragraph, can ‘because’ be used to refer to the sentence before it? #15 Or does it always have to combine the sentence that comes before it?

Pak: #16 I rechecked and found that ‘so on’ can be used here, I was wrong.

#17 I also misunderstood that ‘good idea’ can’t be used here. #18 You have found it in the book, so it’s fine.

#19 ‘ because’ cannot stand alone, you must use it to combine sentences if you want to refer to the sentence that comes before it.

(Pak and Jai i., peer feedback on writing task 2, March 2018)

Pak began with a direct suggestion on how Jai i. should make revision. She also provided explanation supporting her suggestion to revise (sentence 3). Moreover,

Pak suggested Jai i's word choice might be incorrect (sentence 4). In replying to comments, Jai i. agreed with Pak's feedback. However, he explained to Pak that he searched for more information and found that it was not imperative to substitute his word choice (sentence 12). He also used a counter-argument question to show that peer feedback may contain error (sentence 13). The giver of feedback admitted error and learnt from the student writer (sentence 16 and sentence 17).

In her following comment, Pak identified errors along with providing suggestions on how to make revisions (sentences 5-7). In replying to Pak's comments, Jai i. was deciding to revise; however, he used questions for clarification (sentences 14-15). She also provided answer to Jai i's question regarding the use of connection word (sentence 19). From this interaction, both students of high proficiency dyad took a collaborative pattern. The student reviewer identified errors and provided advice for revision while the student writer actively engaged in the activity in clarifying to exchange ideas and learn from each other.



*4.1.1.2 Expert/novice pattern*

Students who took an expert pattern of interaction provided suggestions, showing effort in using questions that engaged novice student in revising his or her essay. Students' interaction below is classified as expert/novice because the student reviewer pointed out the error in her peer's writing while the latter acknowledged the help and admitted her errors. There was no other initiative made by the novice writer.

*Excerpt 2 (Expert/novice)*

Ram's feedback on Moi's persuasive essay:

Ram: #1 The plural form of storey is incorrectly used in some parts. #2 The first and the second reasons are similar but the overall of the first paragraph is comprehensible. #3 The reason about " has larger garden space" is not logic. #4 What about using 'with the same amount of money' instead?

Moi: #5 Um... I forgot to recheck, hahaha. #6 As for the garden, it means the area around the house!

(Ram and Moi, peer feedback on writing task 1, February 2018)

The interaction of intermediate and low levels dyad was regarded as expert/novice pattern. Ram, who had intermediate proficiency, took an expert stance in identifying grammatical errors along with using question as a suggestion to encourage Moi to reflect on what she had written (sentence 3 and sentence 4).

Taking a novice stance, Moi, who had low proficiency level agreed with Ram's feedback by admitting errors and explained that she made error because she forgot to reread her writing. She then clarified her idea in response to Ram's suggestion. Although her explanation was quite brief, Moi further justified the use of "has larger garden space" to show the benefit of her choice.

Students' interactions in this study were short as the students usually gave feedback by moving quickly to another topic without waiting for their peer to discuss on one topic at a time, leading student writers to simply provide answers to the questions and to accept the feedback rather than engage in a discussion about the problem.

*4.1.1.3 Expert/passive pattern*

The ‘ expert/ passive’ interaction pattern refers to the interaction that the student reviewer gave direct suggestion, showing effort to engage student writer in the interaction. However, the student writer did not continue the interaction. Students’ interaction below shows how the student reviewer who took an expert stance provided feedback, but there was a lack of negotiation as the student writer did not ask for further explanation.

*Excerpt 3 (*Expert/passive*)*

Dasi’s feedback on Ji’s problem solution essay:

Dasi: The content is clear. In the 1st paragraph, should you use those areas instead? As for the 2nd paragraph, it sounds unnatural to use the amount of cars, it is better to use the number of cars.

Ji: …

(Ji. and Dasi, peer feedback on writing task 2, March 2018)



Assuming an expert stance, Dasi began her comment by using counter-argument question to encourage Ji to reflect on what he had written and decide to make revision. Dasi then provided suggestion along with reason supporting changes. However, the student writer did not acknowledged the error. He did not mention anything about the comment received. The latter was then regarded as taking a passive role during this interaction.

*4.1.1.4 Dominant/dominant pattern*

The finding of this study revealed only one student dyad with dominant/dominant pattern of interaction. The student writer whose interaction was considered as dominant did not revise according to the peer feedback because he insisted on his own opinion. Students' interaction below illustrates how dominant students replied to each other, showing disagreement at the use of either.

*Excerpt 4* (Dominant/dominant)

Harry's feedback on Nai's persuasive essay:

Harry: In the first paragraph, the use of 'either be' seems to be incomplete. What do you think?

Nai: I already mentioned that the house has many storey. The use of 'either be' one storey in the following sentence should be correct.

Harry: But 'either be' and 'or' should be in the same sentence.

Nai A: 'or' doesn't have anything to do with either. It just modifies multi-storey. I think it is different from your concept of using 'either... or...'.

(Nai and Harry, peer feedback on writing task 1, February 2018)

From the interaction above, Harry had tried to point out that 'either' should be used with ' or' within the same sentence, otherwise the sentence would be incomplete. However, Nai did not accept that his sentence was incomplete. He

explained that he did not use ‘or’ to convey the meaning of ‘either or’, but to modify the noun after it. In this interaction, neither of them agreed with each other’s idea. So, this interaction was regarded as dominant/dominant.

*4.1.1.5 Dominant/passive pattern*

The ‘dominant/passive’ interaction pattern refers to the interaction that the student reviewer provide direct suggestion but the student writer did not continue the interaction. Students’ interaction below was classified as ‘dominant/passive’ as it illustrates how the student reviewer provided feedback without any attempt to engage the student writer into the activity. The dominant reviewer did not use questions to allow other to express his or her opinion. There was a lack of negotiation as the student writer did not ask for further explanation.

*Excerpt 5 (Dominant/passive)*

In the interaction below, Pak provided comment on Jai i.’s persuasive essay:

Pak: - Paragraph1, 1. The lead sentence is already good. 2. The second sentence, ‘relaxation’ should not be used repeatedly, replace it with pronoun (it). 3. The third sentence: ‘such as’ is followed by noun, there should be a noun after multi-storey and one-storey, for example, house, home, residence. 4. ‘or’ should be replaced by ‘and’

- Paragraph 2, 5. The third sentence: I understand what you want to convey but your sentence sounds incorrect. You may need to rewrite it.

- Paragraph 3, 6. When using ‘from my experience’, it should be about your experience rather than general things. For example, I have two-

storey house, so I could move things upstairs. This differs from my friend's one-storey house whose belongings cannot be move upstairs.
7. The third sentence: the height of water sounds incorrect. It should be replaced by 'the water level'
- Paragraph 4, 8. The conclusion is concise and easy to understand. There is no need to edit, yay ~.

Jai i.: Thank you, your detailed feedback hahaha

(Pak and Jai i, peer feedback on writing task 1, February 2018)

Pak, whose interaction was considered as novice when receiving feedback from Jai i, was providing even more detailed feedback on Jai i's writing regarding content, grammar, and vocabulary. From this interaction, Pak assumed a dominant interaction pattern. She not only gave direct suggestion on how to revise (comment 7), but also provided explanation of why she suggested revision (comment 3). Moreover, possible revision was given as an example after she had explained why the student writer should make change of his writing (comment 6). However, she seemed to have difficulty in justifying her feedback (comment 5). From this comment, she knew that the sentence was incorrect but she could not explain why and how Jai i.'s should revise. Most of her feedback did not engage the student writer in the interaction. Instead, she provided a series of comments without asking for Jai i.'s opinion. In replying to Pak's feedback, Jai i. was considered as having passive pattern of interaction as she simply acknowledged Pak's help. The next part of this chapter will illustrate each interaction pattern that was found in this study.

### 4.1.2 Pattern of interaction in student dyads of different English proficiency combinations

To shed more light on to each pattern of interaction with respect to English proficiency levels, eighteen students' interactions were examined according to six proficiency combinations as 1. high and low (1 pair), 2. high and intermediate (2 pairs), 3. high and high (1 pair), 4. intermediate and intermediate (1 pair), 5. Intermediate and low (2 pairs), and 6. low and low (2 pairs). The table below illustrates each proficiency combinations and students' interaction patterns.

*Table 9 Students' online interaction patterns for writing task I and II*

| Pair | Proficiency levels | | Participants | | Task 1 | Task 2 |
|---|---|---|---|---|---|---|
| | Reviewer | Writer | Reviewer | Writer | | |
| 1 | High | High | Pak | Jo | Dominant/passive | Collaborative |
| | | | Jo | Pak | Expert/novice | Collaborative |
| 2 | High | Intermediate | Dasi | Ji | Dominant/passive | Expert/passive |
| | Intermediate | High | Ji | Dasi | Dominant/passive | Dominant/passive |
| 3 | High | Intermediate | Fem | Nibit | Expert/passive | Expert/novice |
| | Intermediate | High | Nibit | Fem | Expert/novice | Dominant/passive |
| 4 | High | Low | No no | Nimb | Expert/novice | Expert/novice |
| | Low | High | Nimb | No | Expert/novice | Expert/novice |
| 5 | Intermediate | Intermediate | Kami | Bar | Collaborative | Dominant/passive |
| | | | Bar | Kami | Collaborative | Dominant/passive |
| 6 | Low | Intermediate | Moi | Ram | Expert/novice | Collaborative |
| | Intermediate | Low | Ram | Moi | Expert/novice | Expert/novice |

| | | | | | | |
|---|---|---|---|---|---|---|
| 7 | Intermediate | Low | Nai | Harry | Dominant/passive | Collaborative |
| | Low | Intermediate | Harry | Nai | Dominant/dominant | Expert/novice |
| 8 | Low | Low | William<br>Nok | Nok<br>William | Expert/novice<br>Expert/novice | Expert/novice<br>Dominant/passive |
| 9 | Low | Low | Micro<br>Yola | Yola<br>Micro | Dominant/passive<br>Dominant/passive | Collaborative<br>Collaborative |
| 10 | Low | Low | Hater<br>Odin | Odin<br>Hater | Dominant/passive<br>Collaborative | Expert/passive<br>Dominant/passive |
| 11 | Low | Low | Gateau<br>Nop | Nop<br>Gateau | Expert/novice<br>Expert/novice | Collaborative<br>Expert/novice |
| 12 | Low | Low | Eiez<br>So | So<br>Eiez | Dominant/passive<br>Dominant/passive | Dominant/passive<br>Expert/passive |
| 13 | Low | Low | Soph<br>Kitty | Kitty<br>Soph | Dominant/passive<br>Collaborative | Collaborative<br>Expert/novice |
| 14 | Low | Low | Yang<br>Twen | Twen<br>Yang | Expert/passive<br>Expert/novice | Expert/novice<br>Collaborative |
| 15 | Low | Low | Linds<br>Cal | Cal<br>Linds | Dominant/passive<br>Dominant/passive | Expert/passive<br>Collaborative |

*4.1.2.1 High proficiency dyad*

From this study, one student dyad of high proficiency level could be paired. The interaction of this high proficiency dyad revealed an expert/ novice pattern in

which the student reviewer performed as an expert while the student writer took a novice role:

Jai i.'s comments on Pak's writing

| **Task 1** | **Task 2** |
|---|---|
| **Expert/novice** | **Collaborative** |
| Jai i.'s comments on Pak's persuasive essay:<br>Jai i.: Paragraph 2, #1. Overall is well-written and comprehensible, but there are some grammatical errors, ex. forgetting to put 's' in subject and verb agreement and comma missing after connection words such as Therefore and Moreover #2. The final sentence does not need plural 's' after 'each', does it? This is because it refers to each inch. #3. In the conclusion paragraph, 'it' should be used with 'has' in the final sentence, shouldn't it? #4. Words such as 'so' can be used to connect the sentence. #5. It is better for comprehension to replace 'space' with 'area' because the former conveys the | Jai i.'s comments on Pak's problem solution essay:<br>Jai i: #1. Essay is easy to understand. #2. The given example for solution is clear, so it is easy to understand how to solve problem. #3. There are few errors in each paragraph. #4. Paragraph 1: There is no need to put ' s' after ' every year' . #5. Conclusion paragraph: the method after 'besides' should be included in the previous paragraph because the conclusion should sum up the content from the paragraph above, not adding more details. #6. I couldn't find any other errors.<br>Pak: Thank you very much, I will then finish my conclusion at |

| | |
|---|---|
| meaning of house space<br>Pak:I forgot to check, thank you<br>(Jai i. and Pak, peer feedback on writing task 1, February 2018) | ‘ transportation part’ and delete ‘besides’.<br>(Jai i and Pak, peer feedback on writing task 2, March 2018) |

From task 1, Jai i. who once assumed a passive role in receiving feedback from Pak, was now taking an expert stance by directly identifying errors in Pak’ s writing (sentence 1). He also provided suggestions on how to make revision by using questions that encouraged the novice writer to engage in her writing (sentence 2). Moreover, Jai i. also justified his comment when suggesting revision (sentence 5). In replying to Jai i.’ s question, Pak acknowledged the help; she agreed with his feedback and explained that she made errors because she had forgotten to recheck her essay. However, her interaction pattern shifted from novice to dominant when providing feedback to Jai i.’s writing. Excerpt 5 illustrates a dominant/passive pattern that was found in the same high proficiency student dyad.



From task 2, Jai i. provided direct suggestion on how to revise (sentence 4). His suggestion was also provided with explanation that justified his comments (sentence 5). The interaction between Jai i. as a giver of feedback and Pak as a student writer was identified as collaborative because Pak gave explanation of how she was going to make revision in accordance with the feedback received. From this interaction, Pak who had once assumed a novice stance in the first writing assignment, was now taking an active role in not simply acknowledging the help from Jai i. Instead, she planned for her revision based on Jai i.’s feedback in the second

writing task. The interaction between Jai i. as a student writer and Pak as a giver of feedback on the second assignment was also identified as collaborative. It was shown in Excerpt 1.

*4.1.2.2 High-intermediate proficiency dyad*

There were two student dyads under the high and intermediate proficiency levels. In the first writing assignment, both dyads of high proficiency student reviewers and intermediate student writers were identified as having a dominant/passive pattern of interaction. That is, the student reviewer dominated the interaction while the student writer took a novice stance in replying to feedback:

***High proficiency reviewer - intermediate student writer***

Dasi's comments on Ji's essay

| **Task 1** | **Task 2** |
|---|---|
| **Dominant/passive** | Expert/passive |
| Dasi's comments on Ji's persuasive essay:<br>Dasi: Paragraph1 #1. Remove 'it' after every family needs to have. #2. Full stop may not be needed after 'but for me'. Paragraph2 #3. 'more safety' should be replaced by other words. #4. Add 'may get injured'. #5. 'if your family has grandparents' sounds unnatural. Paragraph3 #6. can | Dasi's comments on Ji's persuasive essay:<br>Dasi: #1 The content is clear. #2 In the 1st paragraph, should you use those areas instead? #3 As for the 2nd paragraph, it sounds unnatural to use the amount of cars, it is better to use the number of |

| | |
|---|---|
| be cleaned. #7. it contains. #8. The more floors you've got, the more jobs you need to clean. Paragraph4 #9. Remove 'it' after easy to clean. #10. The content is comprehensible<br>Ji: Thanks, ja<br>(Dasi and Ji, peer feedback on writing task 1, February 2018) | cars.<br>Ji: ...<br>(Dasi and Ji, peer feedback on writing task 2, March 2018) |

From task 1, as a student reviewer, Dasi assumed a dominant stance as she provided a series of comments and suggestion on Ji's writing. Most of her comments were direct and imperative rather than using questions that engaged student writer into activity. Moreover, most of her comments were correct but lacked justification or explanations for her suggestions. As for Ji, his interaction pattern was identified as novice because he simply acknowledged the help without asking for more explanation from Dasi. Like Dasi, Ji as a giver of feedback also took a dominant stance when providing comments on Dasi's persuasive essay. In the task 2, Dasi switched from taking dominant stance to expert stance by using question that encouraged Ji to interact; however, Ji did not engage during the interaction.



### *Intermediate proficiency reviewer and high proficiency writer*

Ji's comments on Dasi's essay

| **Task 1** | **Task 2** |
|---|---|
| **Dominant/passive** | **Dominant/passive** |

Ji's comments on Dasi's persuasive essay:

Ji: Paragraph 1

# 1. You should use 'a place for gathering friends' instead.

#2. 'But' cannot be used to begin the sentence.

Paragraph 2

#3. 'Or' cannot be used to begin the sentence either.

Paragraph 3

#4. The last sentence should be changed to 'In other words, building a multi-storey house will provide more living space'.

Dasi: Thank you for correcting.

(Ji and Dasi, peer feedback on writing task 1, February 2018)

Ji's comments on Dasi's problem solution essay:

JI: #1. You can delete 'most' to make it concise in paragraph. #2 Very well-written hahaha, I could not find any errors.

Daisy: Thank you very much

(Ji and Dasi, peer feedback on writing task 2, March 2018)



From task1, Ji who took a novice interaction pattern, was now taking a dominant stance when providing feedback to his higher proficiency peer. Although his comments were not correct, they directly addressed what should be revised in Dasi's writing (sentence 1 and sentence 4). Although his comments were revision-oriented, the suggestion of reordering the content and the use of word merely paraphrased what Dasi had already written. Moreover, Ji did not ask for Dasi's opinion, but provided a series of what should be revised to her. In replying to Ji's

comment, his higher proficiency peer assumed a novice stance by acknowledging the help without defending her writing.

In writing task two, the interaction of Dasi as a giver of feedback and Ji as a student writer changed from dominant/ passive to expert/ passive pattern. This interaction pattern is shown in Excerpt 3. The interaction of Ji as a student reviewer and Dasi as a student writer remained dominant/ passive. Comparing with his feedback on the first writing assignment, Ji provided fewer comments on his higher proficiency peer's essay. His stance during peer feedback remained dominant as he only suggested how Dasi should revise (sentence 1). The interaction was very short; only one suggestion regarding word choice was identified in this interaction. Ji explained that he could not find any more errors on his higher proficient peer's writing. As for Dasi, her interaction also remained a passive pattern as she only acknowledged the help.

***High proficiency reviewer and intermediate proficiency writer***



Femme de L.'s comments on Nibita's essay

| **Task 1** | **Task 2** |
|---|---|
| **Expert/passive** | **Expert/novice** |
| Femme de L.'s comments on Nibita's persuasive essay:<br>Femme de L.: #1 Paragraph 1: These are the reasons *<br>#2 Paragraph 3: Isn't it | Femme de L.'s comments on Nibita's problem-solution essay:<br>Femme de L.: #1 *many diseases<br>#2 I think you should begin your thesis |

‘Instead’, Nibita? #3 Great job, might be a few grammatical mistakes and I think you should separate some long sentences to make them easier to read.

Nibita: Doremon, please help!

(Femme de L. and Nibita, peer feedback on writing task 1, February 2018)

statement as ‘there are two ways’. #3 The main reasons that are responsible

Nabita: I want to say that it is one of the main reasons. Is it too long?

Femme de L.: #4 I mean that you should correct grammar.

Nabita: Ok

Femme de L.: #5 In you 2nd reason, I want you to explain more about how it relates to pollution.

Nabita: I already mentioned about toxic so I did not write about pollution because it will be too repetitive.

Femme de L.: # 6 I mean you should add more sentences to explain. #7 *which is necessary

(Femme de L. and Nibita, peer feedback on

| | |
|---|---|
| | writing task 2, March 2018) |

From the interaction above, student reviewer was identified as taking expert role in providing both direct suggestion sentence 1) and question that aimed to prompt Nibita to reflect on what she had written (sentence 2). However, Nibita did not answer Femme de L.'s question. She took a passive role by asking for more help from the student reviewer's feedback.

In the writing task two, the interaction of Femme de L. as a giver of feedback remained expert while Nibita shifted her stance from passive to novice when receiving comments from Femme de L. In task 2, Femme de L.'s comments were presented as a series of first-person commands about how Nibita should revise (sentence 2). Taking an expert stance, Femme de L. provided answers to all Nibita's questions. This interaction illustrates an expert/novice pattern, showing how student with higher proficiency performed as expert while the intermediate student writer assumed novice stance when receiving feedback.



***Intermediate proficiency reviewer and high proficiency writer***

**Nibita and Femme de L.**

| **Task 1** | **Task 2** |
|---|---|
| **Expert/novice** | **Dominant/passive** |
| Nibita's comments on Femme de L.'s persuasive essay: | Nibita was providing comments on Femme de L.'s problem-solution essay: |

| | | | |
|---|---|---|---|
| Nibita: | 1st paragraph: #1 It' s sound more natural with ' should think carefully before buying it'. #2 You should add 'In my opinion,' before your thesis statement<br><br>2nd paragraph: #3 And you misspell the word ' explore'. #4 Replace the word 'exploit' with 'use'. #5 Do you think ' exploit' conveys the meaning of taking advantage? | Nibita: | #1 The first sentence of paragraph 2, 'planting' should be used to replace 'using'. #2 The rest is already good. It is easy to understand. |
| Femme de L.: | If you mean 'exploit', I intend to use that word. | Femme de L.: | Okay |
| Nibita: | Ok ka, Nibita | | |
| | (Nibita and Femme de L., peer feedback on writing task 1, February 2018) | | (Nibita and Femme de L., peer feedback on writing task 2, March 2018) |



Nibita began his feedback with suggestions (sentence 1 and sentence 2). She first pointed out Femme de L.'s error in spelling of the word 'explore'. Taking an expert stance, Nibita then used question that allowed Femme de L. to express his opinion. Femme de L. first rejected Nibita's suggestion about the use of word. He

then responded defensively by explaining that it was his intention to use the word 'exploit' not 'explore'.

In the writing task two, the interaction of Nabita as a giver of feedback and Femme de L as a student writer shifted from expert/ novice to dominant/ passive pattern. The interaction was very short; Nibita provided less feedback comparing with the first writing assignment. Only one suggestion regarding word choice was identified in this interaction. In replying to Nibita's comment, Femme de L. assumed a novice stance by simply agreeing with her feedback.

*4.1.2.3 High-low proficiency levels dyad*

This study revealed a dyad of students with high and low proficiency levels. In the first writing assignment, both student reviewers of high and low proficiency levels were identified as having expert/novice pattern of interaction:

***High proficiency reviewer and low proficiency writer***

**No no. and Nimbus**



| **Task 1** | **Task 2** |
|---|---|
| **Expert/novice** | **Expert/novice** |
| No no was providing comments on Nimbus's persuasive essay:<br>No no: #1 The first sentence is a bit confusing. #2 2nd paragraph, "the first reason that we should live…" is likely to be better. "saved" is | No no was providing comments on Nimbus's problem solution essay:<br>No: #1 In the first sentence, the word 'breath' should not be used. #2 It should be replaced by the word ' air' which is more related. #3 The second |

incorrectly used. #3 ‘s’ should be put after ‘require’. #4 ‘s’ after ‘help’ in the following sentence should be removed “Appliances which helps”

Nimbus: Ok, thank you, I will correct my writing.

What make you confused about the first sentence? Is it the use of comma in “ House, one of the four factors we need to live in the world, is where we stay and rest.” ? If you mean the use of comma, it modifies house that it is one of the four necessary factors.

No no: Oh, understood

(No no and Nimbus, peer feedback on writing task 1, February 2018)

sentence is incorrect. #4 Why ‘ but’ is used to begin the sentence while sentence does not show contrary? #5 ‘ nowadays’ should have a comma. #6 Also, “ air has much dust” is incorrect. #7 What does “ car measurement” in the 2nd paragraph mean? #8 I think that the following sentence is incorrect and confusing; “ using cars emit smoke in exhaust and everybody may use private cars so air has dusts and toxic.” #9 In the 3rd paragraph, is it correct to use ‘about’ in “ one of reason about air pollution”?

Nimbus: Ok, I will use the word ‘air’ instead. First, I intend to write ‘but in nowadays’, so I used ‘but’ here. I will revise though. I will revise

| | |
|---|---|
| | the sentence air has much dust. 'car measurement' here means the measures of car use. I will revise the rest. |
| | (No no and Nimbus, peer feedback on writing task 2, March 2018) |

The interaction above was classified as an expert/ novice pattern. No no assumed an expert stance by providing feedback that allowed Nimbus to clarify her idea (sentence 1). He then presented a series of direct suggestion about how Nimbus should revise (sentence 2 and sentence 3). However, he did not provide any explanation about why Nimbus should make revision. In replying to No no.'s comments, Nimbus used question to ask for clarification because she did not understand No no's feedback (sentence 1). She did not know why No no mentioned that her sentence was unclear. Nimbus then chose to explain the use of comma instead of clarifying her sentence properly. This interaction could have been identified as collaborative if No no further provided reason of why he mentioned that the first sentence was unclear to Nimbus.

In writing task 2, the interaction of No no as a giver of feedback and Nimbus as a student writer remained expert/novice pattern. Assuming an expert stance, the

high proficiency student provided more questions along with direct suggestion on his lower proficiency peer in the writing task two. From the interaction above, the higher proficiency student also gave explanation of his suggestion (sentence 1 and sentence 2). He used counter-argument question to prompt Nimbus to reflect on what she had written (sentence 3 and sentence 4). Moreover, he used clarification question and problem-solution question that aimed to ask for clarification and to point out errors, respectively (sentence 7 and sentence 9). In replying to her higher proficiency peer, Nimbus took a novice stance by clarifying her writing intention and agreed to revise.

***Low proficiency reviewer and high proficiency writer***

Nimbus and No no

| **Task 1** | | **Task 2** | |
|---|---|---|---|
| Expert/novice | | Expert/ novice | |
| Nimbus was providing comments on No no's persuasive essay: | | Nimbus was providing comments on No no's problem-solution essay | |
| Nimbus: | #1 1st paragraph, the comma is already put after ' however' , should you remove the comma after 'in my opinion'? | nimbus: | #1 In the second reason, what does "managing your household waste effectively" mean? |
| | #2 2nd paragraph, it is better to separate sentences after ' to illustrate' rather than | No: | It is mispelled, it should be 'managing'. |

| | |
|---|---|
| using comma.<br><br>#3 3rd paragraph, putting ‘ because’ after ‘ this is’ sounds unnatural to me.<br><br>You may use other words to replace ‘ small children’.<br><br>#4 “ The family members can leave the house quickly if there is an emergency, such as fire or earthquake. ” #5 Is it correct to have comma after ‘ emergency’ and before ‘ such as’ ? #6 You may try to recheck this. I think the rest of your paper is already good and comprehensible.<br>Nono: Thanks a lot; I will try to adjust it.<br><br>(Nimbus and No no, peer feedback on writing task 1, February 2018) | The second reason means to manage waste effectively such as waste separation.<br>Nimbus: #2 What about the 1st paragraph, what does “every other day” mean?<br>No: It means ‘every day’.<br><br>(Nimbus and No no, peer feedback on writing task 2, March 2018) |



In the first writing assignment, Nimbus who had lower proficiency level tended to provide feedback regarding punctuation. She used question as a suggestion for revision (sentence 1). A problem-solution question to engage student writer into activity was also used as Nimbus seemed to be uncertain of whether No

no should remove the comma (sentence 5 and sentence 6). Instead of finding the answer for No no, Nimbus suggested that No no should participate by searching for more information and decide to make revision according to his own's opinion. The interaction above illustrates how the lower proficiency student took an expert stance in providing suggestion to her higher proficiency peer. Although most of her comments were regarded as incorrect, No no who had high proficiency level acknowledged the help from Nimbus instead of pointing out that her feedback was incorrect. The reason he opted not to do so will be further reported in the interview findings. In writing task two, Nimbus provided more questions instead of giving direct suggestion as in the writing task one. This interaction was identified as expert/novice pattern. Unlike dominant reviewer, the novice reviewer did not aim to point out errors in her higher proficiency peer. Instead, she used question aiming to seek clarification that could elicit reader's comprehension.

*4.1.2.4 Intermediate proficiency level dyad*

The finding of this study indicated one student dyad of intermediate proficiency level. The interaction of intermediate proficiency dyad illustrated a collaborative pattern in which the student reviewer identified error and used question to engage the student writer in taking active role in planning her own revision.

***Intermediate proficiency dyad***

***Kami and Bar***

| Task 1 | Task 2 |
|---|---|
| **Collaborative** | **Dominant/passive** |
| Kami 's comments on Bar's persuasive essay:<br><br>Kami: #1 Paragraph 1:_1. I think that article + house. #2 I think that 'peacefully' modifies 'find'. #3 I think that there are too many words like 'why when' Do you think so too? #4 I think that that 'bias' is not a verb. #5 Try to use another word with the same meaning.<br><br>#6 Paragraph 2: 5. I think that 'of accident' is incorrect. #7. I think that 'jump out of window to safety' is incorrect but I can understand its meaning hahaha.<br><br>#8 Paragraph 4:. I think that 'point of view', 'of' can be removed, not sure though. #9. I think that 'It give' should be followed by 's', isn't it? #10 not only safety (n.) __, but also reduce (v). #11 the structure 'not only, but also' is parallel like 'and'<br><br>Bar: # 1. Article is added 'A house' #2. Peaceful in this sentence is used as a noun, ex. find | Kami was providing comments on Bar's problem-solution essay:<br><br>Kami.: #1 There is one grammatical error: by two possible way (s). #2 The content is already fine. #3 I think it is very good 10 10 10.<br><br>(Kami and Bar, peer feedback on writing task 2, March 2018) |

| | | |
|---|---|---|
| | something. #3 If use ‘find peacefully’, it means ‘find something peacefully’? #4 Remove ‘why’ #5 Bias can be a verb. #6 Of accident is already correct. #7 Point of view is already correct. #8 Changed to Jump out of window to be safe | |
| Kami: | #12 Ok, I also make errors too. | |

Kami and Bar, peer feedback on writing task 1, February 2018)

From the interaction above, Kami used a series of first-personal pronoun to express his opinion about what should be revised in Bar’s writing (sentence 1 and sentence 7). Question was also used after his comment to engage Bar into the interaction (sentence 3). Instead of providing direct suggestion, Kami expressed his opinion and then allowed Bar to search and to decide for herself (sentence 4 and sentence 5). Moreover, Kami showed his uncertainty when making suggestion (sentence 8). This uncertainty was considered as positive because it could allow the student writer to reflect and decide whether to believe his feedback or to search for more information before deciding to make revision. Kami also did not point out error directly but explained about grammar rule and left it to Bar to revise (sentence 11).

In replying to Kami' s feedback, Bar collaboratively explained what she planned to revise in relation to his comments. However, she explained that she was not going to revise some parts that Kami mentioned in his feedback because they were already correct (sentence 5, sentence 6, and sentence 8). Moreover, she also identified errors in Kami's feedback by justifying why she thought her sentence was already correct, she then used counter-argument question to encourage Kami to reflect on his feedback (sentence 2 and sentence 3).

Comparing with his feedback in the first writing task, Kami was now providing very brief comments on Bar' s problem-solution essay. He identified error and provided direct suggestion regarding grammar sentence 1). In the interaction above, Bar who once took collaborative interaction pattern in exchanging idea with kami, assumed a passive stance in her final assignment.

In the writing task two, the interaction of Bar as a giver of feedback and Kami as a student writer also shifted from collaborative to dominant/ passive pattern. There was a lack of interaction as the student writer did not engage in the activity:



***Intermediate proficiency dyad***

***Bar and Kami***

| **Task 1** | **Task 2** |
|---|---|
| Collaborative<br><br>Bar was providing comments on Kami's persuasive essay:<br><br>Bar: Paragraph1 | Dominant/passive<br><br>Bar was providing comments on Kami's problem-solution essay.<br><br>Barbar P.: #1 You may |

1. #1 The following sentence is confusing. #2 “It is vital that you be aware of being and your condition”

Kami: 1. #1 It means that it is vital to be aware of living and surrounding factor. #2 As for the grammar: it's vital that S (should) be

Bar: #3 Paragraph 2: 2. *for decoration

Kami: #3 I totally forgot, thanks a lot.

Bar: #4 Paragraph 3: 3. The following sentence is incorrect: “ you will not have problem respecting a pain in the leg or a pain in the knee seeing that he does not walk up the stairs”. #5 Remove redundant words. #6 As for ‘seeing that’, it may be replaced by other words.

Kami: #3 Actually, ‘seeing that’ can be used in this context. Its meaning and use are like ‘because’.

(Bar and Kami, peer feedback on writing task 1, February 2018)

forget to check some grammar errors.

#2 The sentence that follows ‘for instance’ is a bit too long, it should be separated.

#3 Parallels (not only).

#4 When beginning a sentence, it should be a clear complete sentence, the first sentence of the second solution should be revised.

#5 The conclusion is a bit short.

(Bar and Kami, peer feedback on writing task 2, March 2018)

In writing task 1, Bar began her comment by identifying Kami's sentence that he thought was incorrect (sentence 1). This sentence was revision-oriented but did not provide suggestion on how to revise. It served as a question for kami' s clarification. In her following feedback, Bar gave direct suggestion regarding word choice without any explanation (sentence 2). In her last comment, she illustrated that Kami's sentence was not correct (sentence 4, sentence 5, and sentence 6). In replying to Bar's feedback, Kami first collaboratively clarified the sentence that Bar had identified as confusing by replacing vocabulary and explaining about her sentence structure. She also accepted that Bar's suggestion was correct but her word choice could be used too.

In writing task two, the interaction patterns of Kami and Bar shifted from collaborative to dominant/passive. Assuming a dominant stance, Bar gave feedback by identifying errors with suggestion and reason for revision (sentence 2). He did not use question to engage Kami into the activity. Taking a passive interaction pattern, Kami neither defended nor admitted errors identified by the student reviewer.



*4.1.2.5 Intermediate-low proficiency level dyad*

The finding of this study indicated two student dyads of intermediate and low proficiency students.

**Intermediate proficiency student reviewer - low proficiency student writer**

**Ram and Moi**

| **Task 1** | **Task 2** |
|---|---|
| **Expert/novice** | **Expert/novice** |

| Ram's comments on Moii's persuasive essay: | Ram's comments on Moii's problem solution essay: |
| --- | --- |
| (Please refer to Excerpt 2 for Ram's comments on Moi 's task 1.) | Ram: Is the article in the following sentence missing? MRT, BTS should be changed to pubic transports?<br>Moi: It just happens that I forgot hahaha<br><br>(Ram and Moi, peer feedback on writing task 2, March 2018) |

Taking an expert stance, Ram did not directly point out error; however, she used problem-solution question to encourage her lower proficiency peer to reflect on grammatical error. She also used counter-argument question as a suggestion regarding word choice. Assuming a novice stance when receiving comments, Moi admitted errors and further explained that she forgot to recheck. In the writing task 2, the interaction between Ram as a giver of feedback and Moi as a student writer remained an expert/novice pattern.



**Low proficiency student reviewer - Intermediate proficiency student writer.**

**Moi and Ram**

| Task 1 | Task 2 |
|---|---|
| *Expert/novice* | *Collaborative* |
| Moi (low proficiency)'s comments on Ram (intermediate proficiency)'s persuasive essay:<br><br>Moi: #1 Paragraph 1 There are a few grammatical mistakes such as 'has more benefits'.<br>#2 Reasons are clearly presented, the overall is concise and easy to understand.<br>Ram: #1 Argh I totally to recheck that part, thank you very much for your suggestion.<br><br>(Moi and Ram, peer feedback on writing task 1, February 2018) | Moi (low proficiency) was providing comments on Ram (intermediate proficiency)'s problem-solution essay.<br><br>Moi: #1 I'd like to suggest that after 'can', 's' in leads should be removed.<br>#2 'fixing' in the second paragraph should be changed to 'try to fix' #3 In the 2nd paragraph: 'in\many ways such as' should be followed N./v.ing. #4 In the 3rd paragraph, 's' after creates in'generating electricity can creates' should be removed. #5 In the 4th paragraph, the sentence should be 'we should protect'.<br>Moi: #6 According to the song that I've heard from Enconcept, whether to use 'try to do' and 'try doing' depends on the |

meaning you want to convey.

Ram: #1 Ok, thank you very much, I think I've made grammatical errors in all gerunds using hahaha. #2 I think I will still use 'try fixing' because I'm not conveying the meaning of using effort in fixing, but I mean that there are many ways that we like in using to fix, not that we trying to fix using the way that we like. #3 I did not convey the meaning of try to fix by using the way that we like.

(Moi and Ram, peer feedback on writing task 2, March 2018)

The interaction about writing task 1 was regarded as expert/novice. Moi, who had low proficiency level provided feedback on Ram's writing about grammar and content. Ram acknowledged the help and explained that she made error because she forgot to reread her writing (sentence 1). In task 2, using first-personal pronoun for making suggestion, the lower proficiency student mainly provided directive advice regarding grammar on Ram's problem-solution essay. Moi also referred to external study source to inform his peer about grammar rule (sentence 2 and sentence 6). He then left the decision to make revision regarding the use of gerund to Ram. In replying to Moi's comment, Ram acknowledged the help from student reviewer. She also collaboratively planned on her revision by explaining her decision regarding her choice (sentence 2 and sentence 3). This interaction was then considered as collaborative as the student reviewer did not provide all direct suggestion. Instead, she discussed with the student writer before reaching consensus.

**Intermediate proficiency student reviewer - Low proficiency student writer.**

Task 1: Nai's comments on Harry's persuasive essay (Dominant/passive):

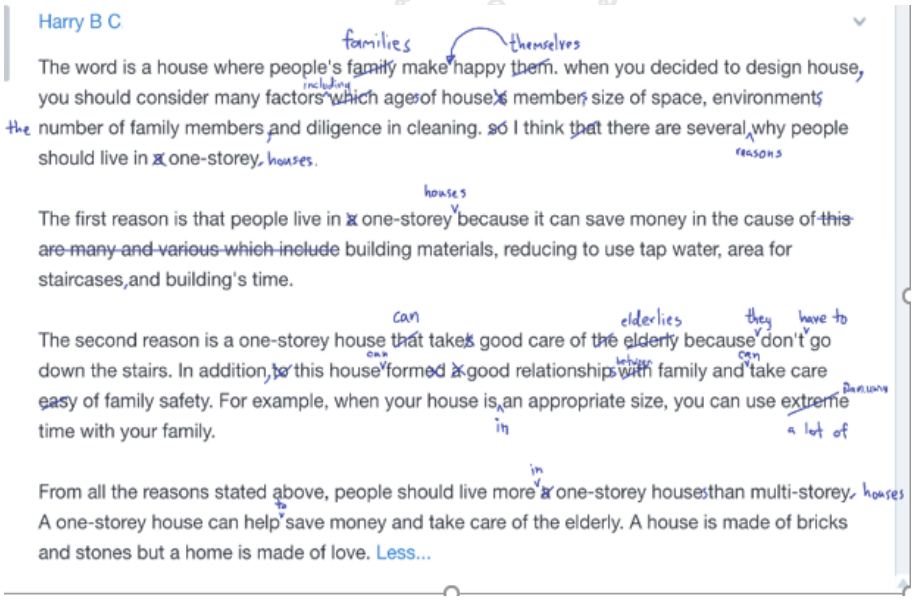



Figure 3 Nai and Harry, peer feedback on writing task I, February 2018

Nai captured Harry's essay as a picture and identified errors on it by using his handwriting. He then submitted his feedback by posting the edited picture of Harry's essay via Edmodo. Taking a dominant stance, Nai who had higher proficiency mainly provided correction on grammar and word choice. His comments were directive, editing nearly every line of each paragraph. Nai neither explained each grammatical error. He did not use questions to seek reaction from student writer. To illustrate, he did not attempt in encouraging Harry to participate in his own writing. Instead, he regarded peer feedback activity as an assignment. As for Harry, he took a passive stance by not contributing; he accepted Nai's feedback without further negotiation.

**Task 2:** Nai's comments on Harry's problem-solution essay (Collaborative):

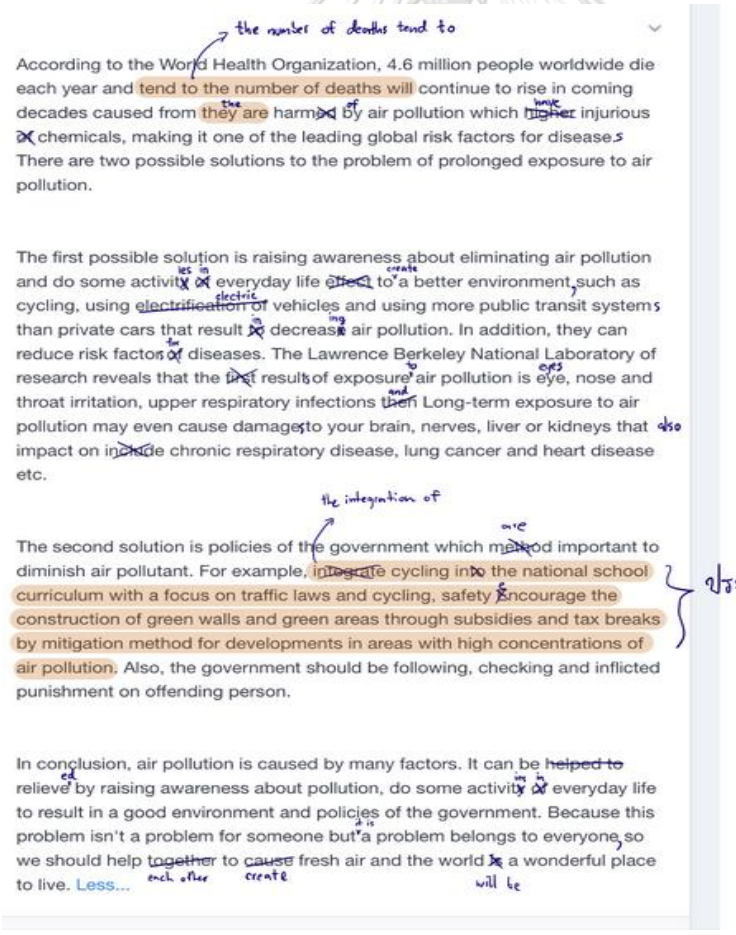



Figure 4 Nai and Harry, peer feedback on writing task II, March 2018

This study reveals that the higher proficiency student provided more feedback throughout all paragraphs. Like his feedback in the writing task one, Nai focused on editing Harry's problem-solution essay regarding grammatical errors. As there were too many errors, Nai captured Harry's essay as a picture and pointed out errors by using his handwriting. He then submitted his feedback by posting the edited picture of Harry's essay via Edmodo. As for Harry, he acknowledged Nai's help. Moreover, he collaboratively made contribution to his own revision by asking Nai about his writing ("thank you, but you say the paragraph 3 is lacking verb, is it correct to write 'we should integrate... and encourage...'?").

**Low proficiency student reviewer - Intermediate proficiency student writer.**

Harry's comments on Nai 's essay

| **Task 1** | **Task 2** |
|---|---|
| Dominant/dominant | Expert/novice |
| Harry's comments on Nai 's persuasive essay:<br><br>(Please refer to Excerpt 4 for Harry's comments on Nai 's task 1.) | Harry's comments on Nai 's problem-solution essay:<br><br>Harry: #1 Clear example and easy to understand<br><br>#2 Paragraph 1: In the last sentence, 'There' should be 'there' because there is a comma which means that it is not a new sentence.<br><br>#3 You should add some |

| | |
|---|---|
| | content to the last<br>paragraph, so it is not<br>too short.<br>Nai: # 1 Ok, you're right, it should be small 't', it's me who forgot. #2 As for the last paragraph, I already reached word limit so I just stop writing hahaha.<br><br>(Harry and Nai, peer feedback on writing task 2, March 2018) |

The interaction of task 2 illustrates how Harry, who had lower proficiency, took an expert stance in providing directive suggestion regarding minor grammatical error on Nai' s problem-solution essay (sentence 2). This interaction was identified as expert/novice pattern because Harry provided corrective comment with explanation while Nai simply acknowledged the help and admitted that he did not recheck his writing before submitting it online (sentence 1).

*4.1.2.6 Low proficiency dyads*

***William's comments on Nok's essay***

| **Task 1** | **Task 2** |
|---|---|
| **Expert/novice** | ***Expert/novice*** |
| William was providing comments on Nok's | William was providing comments on Nok' s |

| | | | |
|---|---|---|---|
| persuasive essay: | | problem-solution essay: | |
| William: | #1 Paragraph1: 1. Paragraph1: the sentence “ House is also somewhere where you . . . ” ‘ where’ after ‘ somewhere’ is not needed in this sentence. #2 Where modifies noun before it. #3 Somewhere is adverb which can be deleted from this sentence. #4 You better change it to “ House is a place where you...”.<br><br>#5 Paragraph 2: 2. I understand the meaning of the following sentence. #6 “ Multi-storey house which can be designed to have many floors is worthily utilized the land.” #7 However, it is grammatical incorrect. It should be separated in two sentences by | William: | #1 In the sentence “The first possible solution is to this problem is reducing...” ‘is’ after ‘solution’ should be removed.<br><br>#2 Using ‘but’ in the following sentence is incorrect “air pollution can be caused by any activity, but combustion fuel of vehicle is the highest rank activity”. #3 This is because the meaning in the following sentence does not contrast but modify the sentence before it. #4 So, it is more correct to use ‘and’.<br><br>#5 In the conclusion part, the sentence “in order to reduce air |

| | | |
|---|---|---|
| | removing ‘which’ and using correct subject.<br><br>#8 3. I do not understand why the word ‘ decision’ is used in the following sentence: “ with the decision to build upwards” . #9 It sounds incorrect to me.<br><br>#10 Paragraph 3: 4 ‘ Therefore’ should have a comma in the following sentence “ multi-storey house can be separated living area therefore upper floors” #11 5 Change at third floors to at the third floor. | pollution we can…” should have comma to separate the sentence. #6 The following sentences should be parallel because they relate to ‘and’, “we can begin by reducing use of personal car and to increase trees and forests.” |
| Nok: | Thank you, as for your comment number 3, I used the word decision to convey the meaning of decision to build several floors. | Nok: Ok, I agree |
| (William and Nok, peer feedback on writing task 1, February 2018) | | (William and Nok, peer feedback on writing task 2, March 2018) |

In task one, assuming an expert stance, William first identified grammatical errors and provided suggestions on how to revise. Using question for clarification, William expressed that he could not understand Nok's use of word (sentence 8). Moreover, he used directive correction (sentence 11) to suggest revision. In replying to William's comment, Nok took novice stance by first acknowledging the help. He further clarified his comment regarding the use of word decision by explaining the meaning he wanted to convey in his writing.

In task two, William and Nok' interactions remained expert/ novice pattern. William's interaction was identified as expert pattern as he began his comments by providing direct suggestion regarding grammatical error (sentence 1). In his following comment, he gave explanation about the use of 'but' and 'and' in connecting sentences before making suggestion on replacing word (sentence 3 and sentence 4). William also commented on the use of punctuation in separating sentences. He finally suggested about the parallel of sentence structure and supported his comments with explanation (sentence 6). In his last comment, he did not provide direct revision, but chose to point out the sentence that should be revised. As for Nok, he took novice stance by agreeing with William's suggestion.



**Low proficiency dyad**

***Nok and William***

| **Task 1** | **Task 2** |
|---|---|
| **Expert/novice** | **Dominant/passive** |
| Nok was providing comments on William's persuasive essay: | Nok was providing comments on William's problem-solution essay: |

Nok: Paragraph 2

1. The word such as ‘so’ can connect sentences.
2. The word ‘space’ conveys the meaning of inside space inside the house. Replace it by ‘area’ will be more correct for understanding
3. Remove ‘in’ before ‘nowadays in paragraph 2.

Paragraph 3

4. if clause should be in type one, so change ‘cannot’ to ‘won’t be able to’
5. Line 5 replace ‘can still’ with ‘will still able to’

Paragraph 4

6. ‘Remember that’ is spoken language, it is better to begin sentence with these following words: conclude, from the reasons I mentioned above, I convinced that...
7. If you delete ‘remember that’ and ‘so’ and connect sentences using ‘if’ instead, it will be more formal written.
8. In the last line, ‘a’ before one-storey house may need to be removed.
9. ‘s’ is needed after ‘house’

Nok: #1 Paragraph2, replace ‘so’ with ‘therefore’ because it should not be used to begin the sentence.

#2 Paragraph3, there should be a continuing sentence after ‘when’, I think you should write the following sentence instead: “...and combustion of it causes air pollution problem”. It is easier for comprehension.

William: I agree, thanks

(Nok and William, peer feedback on writing task 2, March 2018)

because this context refers that everyone has his own. 10. In the last line, delete 'to live' because the sentence before it has already conveyed the meaning of 'live'

William: Thank you, I will edit, but I do not agree with replacing the word 'space' with area' because I think that 'in the same area' means surrounding, it does not only mean the same amount of land.

(Nok and William, peer feedback on writing task 1, February 2018)



In task one, Nok began the interaction by providing information regarding the use of 'so' in connecting sentences. His comments involved both direct and indirect suggestion. When he wanted to make suggestion, he gave the meaning of the word before suggesting to replace it with another one that sounded more suitable for William's essay. Taking a novice stance, William acknowledged the help and agreed to correct. However, he insisted in using the word 'space' providing that its meaning suited with the context that he had written.

In task two, Nok began the interaction by suggesting replacement of word 'so'. He then suggested about changing sentence from ("…most cars use fossil fuel and this kind of fuel when combusted causes air pollution problem." to "…most cars use fossil fuel and combustion of it causes air pollution problem. It is easier for comprehension." ). Although his suggestions were brief, they were given with explanation that justified his comments. In replying to Nok, William assumed a passive stance by acknowledging the help.

**Low proficiency level dyad**

***Task 1: Micro and Yoland***

| **Task 1** | **Task 2** |
|---|---|
| **Dominant/passive** | Collaborative |
| Micro was providing comments on Yoland's persuasive essay:<br><br>Micro: Paragraph one<br>1. There should be a comma after 'So'.<br>2. 'I should not…' should be replaced by 'people should not…' after 'In my opinion'<br>Paragraph two<br>3. There should be a comma after 'The first reason'<br>4. There should be a comma after 'So'. | Micro was providing comments on Yoland's problem-solution essay:<br><br>Micro: #1 what does it mean in the second solution that says "Trees are essential…temperatures "?<br><br>Yoland: It means that trees are effective solution in solving air pollution and the increase of city temperature. |

Paragraph three

5. There should be a comma after ‘the second reason’
6. cannot*
7. In the other hand should be replaced by ‘On the other hand’ and add comma.
8. can is followed by verb infinitive.
9. Last paragraph: must is followed by verb infinitive

Yoland: Thank you very much.

(Micro and Yoland, peer feedback on writing task 1, February 2018)

(Micro and Yoland, peer feedback on writing task 2, March 2018)



In task one, taking a dominant stance, most of Micro’ s comments were presented as a series of suggestion without explanation. He mainly provided feedback on the use of punctuation (1,5). Most comments were provided with directive correction on how to revise, except the last one which he gave an explanation about grammar rule. He then left the decision to make revision to Yoland. In replying to Micro, Yoland took novice stance by acknowledging the help from Micro.

In task two, Micro and Yoland' interactions shifted from expert/novice pattern to collaborative pattern of interaction. To illustrate, Micro did not provide any direct suggestion on how to revise. Instead, he used question that allowed Yoland to clarify her idea. The original sentence of Yoland's essay was "Trees are essentially the cost-effective solution both terrible quality and rising urban temperatures." By providing clarification to Micro, she improved the content of her essay by changing the original sentence to "trees are effective solution in solving air pollution and the increase of city temperature." Using probing question to ask for clarification, Micro helped Yoland to reflect on what she had written and then decided to make change according to what she clarified. Although this interaction was very brief, it served as an essential tool that allowed Yoland to improve the content of her problem-solution essay.

**Low proficiency level dyad**

***Yoland and Micro***



| **Task 1** | **Task 2** |
|---|---|
| **Expert/novice** | **Collaborative** |
| Yoland was providing comments on Micro's persuasive essay:<br>Yoland: Paragraph 1: 1. All is followed by plural noun 'houses'. You should use 'are' as a verb for subject and verb agreement 2. | Yoland was providing comments on Micro's problem-solution essay:<br>Yoland: You have not summarized the main ideas of two solutions in the conclusion part. Should there be |

| | | | |
|---|---|---|---|
| | ‘each rooms’ each must be followed by singular noun. Paragraph 2: 3. Change ‘live’ to ‘living’ because noun should be used to begin the sentence. Paragraph 3: 4. Use living as a subject to begin the sentence 5. Add ‘s’ after ‘Safe’ 6. ‘We are convenient to move’, this sentence is likely to mean that we are the convenient, you should use ‘We will’ Paragraph 4: 7. Many is followed by plural noun, many benefits | | summarization of two solutions in your conclusion? I wonder whether you provided wrong information because the use of fossil fuel can also cause air pollution. |
| Micro: | Thank you ja | Micro: | What I mean is that the fossil fuel causes air pollution, then I suggest the use of alternative energy. |
| | (Yoland and Micro, peer feedback on writing task 1, February 2018) | | (Yoland and Micro, peer feedback on writing task 2, March 2018) |



In task one, as a giver of feedback; Yoland was now taking an expert stance in providing comments to Micro. Her comments were presented as a series of

imperative sentences; however, most of her feedback was given with justification of why Micro should revise his writing (3). Compared with the feedback that Yoland received from Micro, she could provide more details, not just a series of command to revise. In replying to her comments, Micro assumed a novice stance by acknowledging the help from Yoland.

In task two, Yoland began her comments by pointing out that Micro' s conclusion part was not complete. She explained that he did not restate two solutions that he had mentioned in the body parts. After identifying error, Yoland then used counter-argument question to encourage Micro to revise (" should there be summarization of two solutions in your conclusion?"). It seems here that Yoland did not want Micro's answer, but to remind him that he had forgotten to write about the two solutions. Yoland consequently expressed her opinion about the negative effect in using fossil fuel; her comment illustrated her assumption that Micro did not realise about the use of fossil fuel and air pollution that it may cause. In replying to Yoland comment, Micro clarified his intention in using alternative energy instead of fossil fuel. From this interaction, although Micro took a novice stance for Yoland' s first comment, he did not passively accept her second comment. The interaction above indicates that the student could engage more in her own writing when the student reviewer used a question that allowed the student writer to clarify her writing.



In summary, the analysis of students' interactions in this study illustrated five patterns that were identified as collaborative, expert/ novice, expert/ passive, dominant/ dominant, and dominant passive. In task one, students tended to have dominant/ passive and expert/ novice patterns. That is, student reviewers provided directive suggestion on how student writers should make revision (dominant stance)

while those who further provided explanations of their comments were considered as taking an expert stance. The student writers admitted their errors (novice stance) or simply did not continue the interaction (passive stance). Interestingly, only one student dyad was identified as having dominant/dominant stance, demonstrating the role of collectivism culture in students' interactions. It then suggests that although anonymity aspect in students' peer feedback could encourage them to identify errors in peers' writing, it did not enable them to show disagreement with peers' comments. However, in the final task, students could interact more collaboratively by showing their opinion and answering their peers' questions with the aim to reach consensus. The next section will discuss about how students' comment could lead to writing improvement.

**4.1.2 Peer questioning during online interaction**

In this study, three types of questions were identified in students' interaction. In both peer feedback tasks, students mainly used questions to ask for clarification, identify problematic areas, and engage student writers into interaction. In both tasks, students mainly used solution-focused questions to encourage peers into deciding and making revision (T1= 62%, T2= 60%). This kind of question was used to politely identify errors instead of pointing them out directly. The students used solution-focused question with the aim to prompt the writer to revise. In addition, both student reviewers and writers used clarification question to ask for more information about the unclear/missing parts of the content of essay/comments (T1= 23%, T2= 28% ). To encourage peers to articulate their reasoning, the students also used counter-arguments questions when they did not agree with what their peers had written (T1=15%, T2= 12%). The examples of students' questions during online peer feedback are presented in Table 10 below.

*Table 10 Examples of questions during online peer feedback tasks*

| Question types | Task 1 | Task 2 |
|---|---|---|
| Clarification or elaboration questions | - The second paragraph seems irrelevant to the topic, can give more information or tell me more about what do you want to convey?<br>- Can ‘ because’ be used to refer to the sentence before it? Or does it always have to combine the sentence that comes before it? | - It’ s not clear, what does your second solution mean?<br>- The second reason, what does “ managing your household waste effectively” mean? |
| Counter-arguments questions | - It’ s in the supplementary book, so I think it’ s ok to use? | - I want to say that it is one of the main reasons. Is it too long? |
| Solution-focused questions | - Can ‘ because’ be used to refer to the sentence before it? Or does it always have to combine the sentence that comes before it?<br>- ‘ it’ should be used with ‘ has’ in the final sentence, shouldn’t it? | - In the 1st paragraph, should you use those areas instead?<br>- Is the article in the following sentence missing? |

To sum up, the students in this study used questions that had been introduced in the intensive training session for three main reasons. First, they used question to prompt reflection from the student writers with the aim to enable them to make revision. Second, they used question as a way to identify peers' errors. In addition, the students not only used clarification to ask for information but also to hide the inability to comment on high proficiency peer.

## 4.2 What effect does the electronic peer feedback have on the outcomes of students' writing?

This study considered the improvement in grammar and vocabulary along with the sufficiency and appropriateness of its content and organisation as signs of enhanced text quality. The table below illustrates a paired-samples t-test that was conducted to compare students' writing scores between drafts of students' first and second tasks.

*Table 11 Results of paired samples t-test of the difference between drafts*

| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 95% Confidence Interval of the Difference | | | | |
| | | Mean | Std. Deviation | Std. Error Mean | Lower | Upper | | | |
| Task 1 | T1D1 - T1D2 | -1.09167 | .59626 | .10886 | -1.31432 | -.86902 | -10.028 | 29 | .000 |
| Task 2 | T2D1 - T2D2 | -.95000 | .48866 | .08922 | -1.13247 | -.76753 | -10.648 | 29 | .000 |

*Note.* *significance level at $p < .01$, Cohen's d (1.85, 1.98)

Table 11 shows that students had higher scores after they had revised their writing for both writing assignments. The findings indicated the overall improvement in both writing tasks as there was a significant difference in the scores for the first draft (M=15, SD=1.907) and the second draft (M=16.09, SD=1.568), t (29) = -10.028, $p$ < .001 in first writing assignment. The analysis illustrated that the mean for students' revision was higher than the first draft of their writing. Likewise, in writing task two, a significant difference was found in the scores for the first draft (M= 15.31, SD= 1.926) and the second drafts (M=16.26, SD=1.665), t (29) =-10.648, $p$ < .001. This also means that students could improve the quality of their written work, as the scores for the final draft were significantly higher than the first draft. However, the fact that students' scores were higher might not be entirely due to peer feedback. Students' feedback and their revisions will be further discussed in the following section.

The reliability of students' scores was established using A Spearman's rank-order to ensure that students' scores given by two raters were reliable. The result was illustrated in Table 12

*Table 12 Raters reliability of students' writing scores*

**Correlations**

| | | | Rater1 | Rater2 |
|---|---|---|---|---|
| Spearman's rho | Rater1 | Correlation Coefficient | 1.000 | .848** |
| | | Sig. (2-tailed) | . | .000 |
| | | N | 30 | 30 |
| | Rater2 | Correlation Coefficient | .848** | 1.000 |
| | | Sig. (2-tailed) | .000 | . |
| | | N | 30 | 30 |

**. Correlation is significant at the 0.01 level (2-tailed).

Table 12 indicates the reliability of students' writing scores that were given by two raters. A Spearman's rank-order correlation was statistically significant ($r_s$= .848, $p$ < .01), illustrating a very strong, positive correlation between students' writing scores given by two raters.

### 4.2.1 Amount and areas of online peer feedback

A large majority of students' comments involved grammar in both writing assignments 62% (n= 105), 49% (n=63), respectively. The finding also revealed that while many comments addressed grammar issue, relatively few comments in this study recommended changes in organisation. However, in the writing task two, participants generated less feedback regarding grammar and vocabulary, but they provided more comments on content and organisation. Table 13 illustrates the number of students' areas of comments in both writing tasks.

*Table 13 The number of online peer feedback in both writing tasks*

| | Feedback | | | |
|---|---|---|---|---|
| | Task1 | | Task 2 | |
| Areas | *n* | Percent | *n* | Percent |
| Content | 24 | 14.00% | 41 | 32.00% |
| Organization | 4 | 2.00% | 9 | 7.00% |
| Grammar | 105 | 62.00% | 63 | 49.00% |
| Vocabulary | 37 | 22.00% | 16 | 12.00% |
| Total | 170 | 100.00 | 129 | 100.00 |

The table below illustrates the samples of students' comments in each area.

*Table 14 Areas of students' feedback*

| Areas of feedback | Examples of students' feedback |
|---|---|
| Grammar | *"The third sentence: 'such as' is followed by noun, there should be a noun after multi-storey and one-storey, for example, house, home, residence." (high proficiency)* |
| | *"There are some grammatical errors, ex. forgetting to put 's' in subject and verb agreement and comma missing after connection words such as Therefore and Moreover. The final sentence does not need plural's' after 'each', does it? This is because it refers to each inch." (high proficiency)* |
| | *"I think that 'It give' should be followed by 's', isn't it? Not only safety (n.), but also reduce (v). the structure 'not only, but also' should be parallel like the structure of 'and'" (intermediate proficiency)* |
| | *"1. All is followed by plural noun (houses), 2. 'each rooms' is not correct because each must be followed by singular noun." (low proficiency)* |
| | *"I'd like to suggest that after 'can', 's' in leads should be removed. In the 3rd paragraph, 's' after creates in 'generating electricity can creates' should be removed." (low proficiency)* |
| | *"In the last sentence, 'There' should be 'there' because there is a comma which means that it is not a new sentence." (low proficiency)* |
| Vocabulary | *"1st paragraph: it is too repetitive to use the same word 'private vehicles', so you may use another word such as personal car. Still, some words are spoken language, ex. so on, a good idea. Overall, too many redundant vocabularies, you should use substitution or pronoun. You may use 'them' to replace private vehicles." (high proficiency)* |
| | *"The second sentence, 'relaxation' should not be used repeatedly,* |

| | |
|---|---|
| | *replace it with pronoun (it).” (high proficiency)* |
| | *“Should you use ‘explore’ instead of ‘exploit’?” (intermediate proficiency)* |
| | *“In the other hand should be changed to on the other hand.” (low proficiency)* |
| Content | *“When using ‘from my experience’, it should be about your experience rather than general things. For example, I have two-storey house, so I could move things upstairs. This differs from my friend’s one-storey house whose belongings cannot be move upstairs.” (high proficiency)* |
| | *“The first and the second reasons are similar but the overall of the first paragraph is comprehensible. The reason about “has larger garden space” is not logic.” (intermediate proficiency)* |
| | *“You have not summarised the main ideas of two solutions in the conclusion part. Should there be summarisation of two solutions in your conclusion?” (low proficiency)* |
| Organisation | *“I think you should separate some long sentences to make them easier to read.” (high proficiency)* |
| | *“You should add ‘In my opinion,’ before your thesis statement.” (intermediate proficiency)* |
| | *“The sentence that follows ‘for instance’ is a bit too long, it should be separated.” (intermediate proficiency)* |
| | *“If you delete ‘remember that’ and ‘so’ and connect sentences using ‘if’ instead, it will be more formal written.” (low proficiency)* |



Regarding the number of students’ comments, 170 and 129 comments were identified in the writing task one and two. Most of the peer feedback in this study was considered as revision-oriented (n= 149, 87.64% , n= 114, 88.37% ). That is,

comments were provided with suggestion on how student writers should revise. However, it should be noted that not all their revision-oriented comments were correct. It was found that about 68% and 75% of students' comments had quality, respectively. That is, students could generate more correct feedback than they did in the final assignment.

Regarding the feedback types, grammar was the focus among all proficiency levels in the first task (n= 105, 62%). It involved more than half of peer feedback generated by students with intermediate (n= 34, 62%) and low English proficiency levels (n= 58, 67%) and nearly a half of comments provided by those of high proficiency (n= 13, 46%). As for the final task, students of all proficiency levels focused less on linguistic elements as they gave less suggestion about grammar and vocabulary. Moreover, students from high and intermediate proficiency levels generated more feedback about organisation while those from high and low proficiency levels generated more comments regarding content (Table 15).

*Table 15 Students' proficiency levels and feedback areas of writing task I and writing task II*

| Proficiency levels | Areas of feedback | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Grammar | | Vocabulary | | Content | | Organisation | | Total | |
| | T 1 | T 2 | T 1 | T 2 | T 1 | T 2 | T 1 | T 2 | T 1 | T2 |
| High | 46.00 % | 44.00 % | 25.00 % | 4.00 % | 25.00 % | 32.00 % | 4.00 % | 20.00 % | 100 % | 100 % |
| Intermediate | 61.82 % | 60.00 % | 23.63 % | 19.0 % | 14.55 % | 15.00 % | - | 6.00 % | 100 % | 100 % |
| Low | 67.00 % | 45.61 % | 20.00 % | 7.02 % | 10.00 % | 45.61 % | 3.00 % | 1.76 % | 100 % | 100 % |

Considering the quality of students' feedback, it was further found out that regardless of their proficiency levels, their comments showed improvement despite the decreased number in the final task (Table 16).

*Table 16 Quality of peer feedback generated by each proficiency level*

| | Task 1 | | | Task 2 | | |
|---|---|---|---|---|---|---|
| Levels | Quality | No Quality | Total | Quality | No Quality | Total |
| High | 93% | 7% | 100% | 96% | 4% | 100% |
| Intermediate | 75% | 25% | 100% | 81% | 19% | 100% |
| Low | 57% | 43% | 100% | 61% | 39% | 100% |

Table 16 illustrates the number of quality feedback generated by each proficiency level. It indicates that although not all of students' feedback was correct, most comments given by those with high and intermediate levels and more than half of feedback provided by low proficiency level were considered as having quality in both writing assignments.



**4.2.2 Amount and areas of changes in revisions**

The finding of students' writing scores between drafts of both writing tasks indicated significant improvement in students' writing. However, to understand how online peer feedback indeed improved the quality of students' writing, their comments and revisions made between drafts of both writing assignments were investigated.

Table 17 illustrates the total number of students' feedback and those incorporated in students' revisions.

*Table 17 Areas/types of peer feedback and revisions*

| | Feedback | | Revision | |
|---|---|---|---|---|
| | Task1 | Task 2 | Task 1 | Task 2 |
| Areas | *n* | *n* | *n* | *n* |
| Content | 24 | 41 | 41 | 29 |
| Organisation | 4 | 9 | 21 | 14 |
| Grammar | 105 | 65 | 111 | 74 |
| Vocabulary | 37 | 14 | 43 | 43 |
| Total | 170 | 129 | 216 | 160 |

From table 17, the results showed that students revised more in the first writing assignment than in the final one. Many of their comments related to their revision areas. In line with the findings regarding students' feedback, many of students' revisions concerned linguistic elements such as grammar and vocabulary. To illustrate, students improved their writing substantially in terms of grammar as more than half of their revisions in both writing tasks involved editing grammar followed by vocabulary.



The table below illustrates how students revised their writing in terms of re-ordering, addition, deletion, and substitution.

*Table 18 Amount of student operations during revision process of two writing assignments*

| Operation of revision | Task 1 | | Task 2 | |
|---|---|---|---|---|
| | *n* | Percent | *n* | Percent |
| Re-order | 8 | 4.00% | 6 | 4.00% |

| | | | | |
|---|---|---|---|---|
| Addition | 60 | 28.00% | 35 | 22.00% |
| Deletion | 24 | 11.00% | 29 | 18.00% |
| Substitution | 124 | 57.00% | 90 | 56.00% |
| Total | 216 | 100.00% | 160 | 100.00 |

Table 18 illustrates that students tended to revise their written work by substituting words and/or sentences in both writing tasks. The finding indicated that more than half of their revisions involved substitution in writing task one and writing task two (57% and 56%). While students tended to revise by using substitution, they rarely made change by re-ordering.

The examples of each revision area that compared between the first and the final draft are provided in table 19.

*Table 19 Areas of students' revisions*

| **Areas of revision** | **Examples of students' revisions** |
|---|---|
| Grammar | Draft 1<br>All house in my village is one-storey house… we do not have to walk up and down stairs and save time to walk to each rooms.<br>Draft 2<br>All houses in my village ~~is~~ are one-storey house… we do not have to walk up and down stairs and save time to walk to each room.<br>(Micro, task 1) |
| Vocabulary | Draft 1<br>The first possible solution to air pollution is to decrease using private |

vehicles. The more we use private vehicle, the more toxic gases are emitted. It would be a good idea to use public transportation instead of private vehicles.

Draft 2

The first possible solution to air pollution is to decrease using private vehicles. The more we use them, the more toxic gases are emitted. It would be a good idea to use public transportation instead of personal car.

(Jai I, task 2)

Content

Draft 1

From my experience, the biggest flood occurred in many areas of Thailand in 2011. People couldn't live in a one-storey house because the height of water is more than 1 meter while a multi-storey house could cope with this situation. We could move our foods and appliances to another floor.

Draft 2

From my experience, the biggest flood occurred in many areas of Thailand in 2011. I couldn't live in a one-storey house because the water level is more than 1 meter while my friend who lives in a multi-storey house could cope with this situation. He could move his foods and appliances to another floor.

(Jai I, task 1)

Organisation

Draft 1

The second solution is to reduce toxic gases in the air by planting more trees. Because the trees need carbon dioxide which is one of the toxic gases in the air to use in food-producing process.

Draft 2

The second solution is to reduce toxic gases in the air by planting

> more trees. ~~Because~~ The trees can reduce these gases <u>because</u> they need carbon dioxide which is one of the toxic gases in the air to use in food-producing process.
>
> (Jai I, task 2)

This study found that students' changes involved both major and minor grammatical errors such as substituting singular/plural noun, replacing verb, adding punctuation after conjunction, and/or using capital letter to begin the sentence, but students rarely made change in terms of organisation. The table below illustrates students' areas of revisions among all proficiency levels.

*Table 20 Students' proficiency levels and revision areas of writing task I*

| Proficiency levels | Areas of revision | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Grammar | | Vocabulary | | Content | | Organisation | | Total | |
| | T1 | T2 | T1 | T2 | T1 | T2 | T1 | T2 | T1 | T2 |
| High | 34.38 % | 46.15 % | 25.0 0% | 23.09 % | 25.00 % | 15.38 % | 15.63 % | 15.38 % | 100 % | 100 % |
| Intermediate | 51.28 % | 79.00 % | 17.9 5% | 6.00 % | 25.64 % | 3.00 % | 5.13 % | 12.00 % | 100 % | 100 % |
| Low | 53.79 % | 44.25 % | 21.3 8% | 20.35 % | 15.86 % | 23.01 % | 8.97 % | 12.39 % | 100 % | 100 % |



Regarding students' proficiency and their revision areas, this study indicated that students of low and intermediate proficiency levels had the highest percentage of revision involving grammar in both writing tasks, High proficiency students also tended to focus on making changes by editing grammar and vocabulary. Of all areas

of revision, this study found that all proficiency levels focused less on revising organisation.

### 4.2.3 Proportions of peer-initiated revisions in total revisions

With respect to students' revisions, this study found that students made 216 changes in the first task and 160 revisions in the final assignment. Interestingly, among these changes, those that were initiated by student writers were found to be higher than those initiated by peer feedback in both writing assignments. In the first task, self-initiated revisions involved 60% (n= 129) and slightly decreased to 57% (n=91) in the second task. As for peer-initiated revisions, they were found at 40% (n= 87) in the first assignment and slightly increased to 43% (n= 69) in the second task. This finding further demonstrated that among students' revisions that were initiated by peer feedback, 79.31% (n= 69) and 81.00% (n= 56) were considered as students' changes that improved writing quality, respectively.

*Table 21 Initiator of students' revisions*

| Initiator of revision | Task 1 | | Task 2 | |
|---|---|---|---|---|
| | *n* | Percent | *n* | Percent |
| Self | 129 | 60.00% | 91 | 57.00% |
| Peer | 87 | 40.00% | 69 | 43.00% |
| Total | 216 | 100.00% | 160 | 100.00% |



Table 21 illustrates that although more than half of students' revisions were found to be self-initiated suggesting that the better quality of students' revised drafts was not related to peer feedback, the qualitative analysis suggested that self-initiated revision could also be indirectly impacted by peer feedback. That is, student writers

did not edit their writing based on their peers' suggestion, but they revised their writing by making their own decision in the part identified by their peers. The example of student' paragraph below shows how peer feedback might lead the student writer to make change of their writing.

Bar's persuasive essay

Draft one

*As we know, house is a place where we can find peaceful. It is our comfort zone. These are the reasons why when we have to consider to buy a house, we should choose it carefully. There are two types of house including a one-storey house and a multi-storey house. Some people bias multi-storey house. However, i think people should live in a one-storey house for two main reasons.*

*Draft two*

*As we know, house is a place where we can find peace. It is our comfort zone. These are the reasons why ~~when~~ we have to consider when buying a house, we should choose it carefully. There are two types of house including a one-storey house and a multi-storey house. Some people are biased toward a multi-storey house. However, I think people should live in a one-storey house for two main reasons.*



In the sample of persuasive essay above, Bar' s first paragraph illustrates changes made between drafts according to both of her own decision and her peer suggestion. In her first draft, Bar used the adjective 'peaceful' after the transitive verb 'find'. Kami who was the student reviewer suggested that peacefully should be used to modify the verb 'find'. However, the student writer did not revise according to Kami's suggestion. Instead, she made her own decision by substituting the adjective 'peaceful' with 'peace' and used it as a noun after the transitive verb 'find'. Although, Kami's feedback was not entirely correct, it did draw Bar's attention to the error that needed revision.

Furthermore, Kami made suggestion by asking Bar whether ‘why’ and ‘when’ were redundantly used. Although it neither improved nor deteriorated the quality of her essay, Kami’s question led Bar to delete ‘when’ and decided to add ‘when buying’ to her paragraph. Moreover, Kami identified error in the use of ‘bias’ by explaining that it could not be used as a verb. Although Kami’s explanation about the use of bias was not entirely correct, it led Bar to recheck and revise her writing by using ‘bias’ as an adjective. This revision was another part that the student writer did not revise according her peers, but did correct error in her writing by her own decision.

Table 22 illustrates the percentages of quality of changes in students’ drafts.

*Table 22 Quality of students’ revision in two writing assignments*

| Quality of revision | Task 1 | | Task 2 | |
|---|---|---|---|---|
| | *n* | Percent | *n* | Percent |
| Revision better | 192 | 89.00% | 149 | 93.00% |
| Original better | 3 | 1.00% | 3 | 2.00% |
| No change | 21 | 10.00% | 8 | 5.00% |
| Total | 216 | 100.00% | 160 | 100.00% |



In both writing tasks, most of students’ changes made between the first and the final assignments were identified as having quality as they could improve text quality. To gain more insight into whether students’ changes were initiated by peer comments or student’s writer themselves, their revisions made between drafts were further investigated. Table 23 indicates the percentages of revision initiators of all proficiency levels.

Table 23 Students' proficiency levels and initiator of revision

| | Initiators of revision | | | | | |
|---|---|---|---|---|---|---|
| | Task I | | | Task II | | |
| Proficiency levels | Self | Peer | Total | Self | Peer | Total |
| High | 66.00% | 34.00% | 100% | 62.00% | 38.00% | 100% |
| Intermediate | 71.00% | 29.00% | 100% | 65.00% | 35.00% | 100% |
| Low | 54.00% | 46.00% | 100% | 62.00% | 38.00% | 100% |

From Table 23, it appears that the student writer of all proficiency levels initiated more than half of students' revisions in both tasks. The intermediate students were found to have the highest percentage of self-initiated revisions followed by the high proficiency students and the low proficiency students. Interestingly, the intermediate proficiency students were found to have the highest percentage of self-initiated revision in both tasks.

The sample of writing below illustrates student's revisions that were mainly initiated by the student writer. The qualitative analysis identified five changes that were made by the high proficiency student (self-initiated revisions).

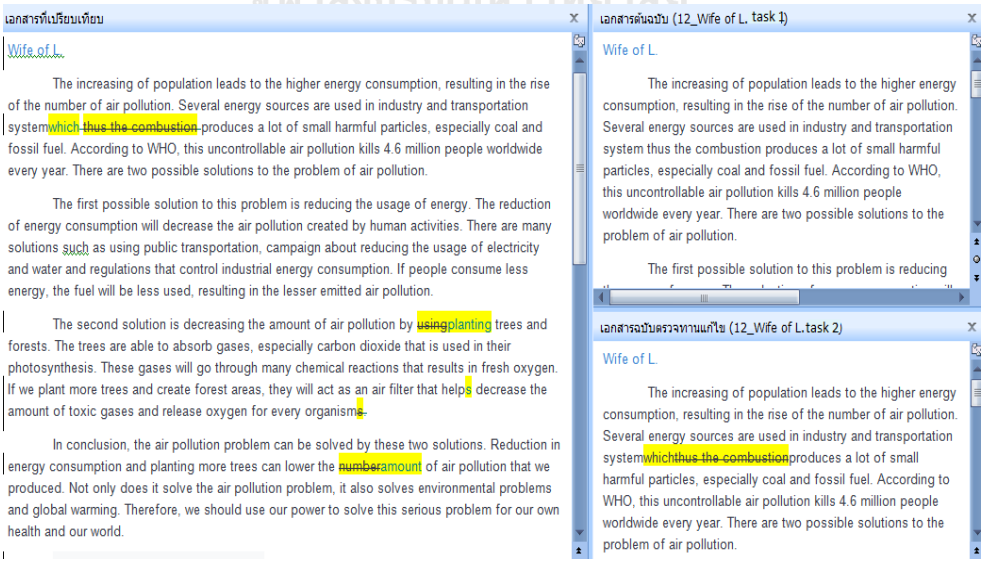
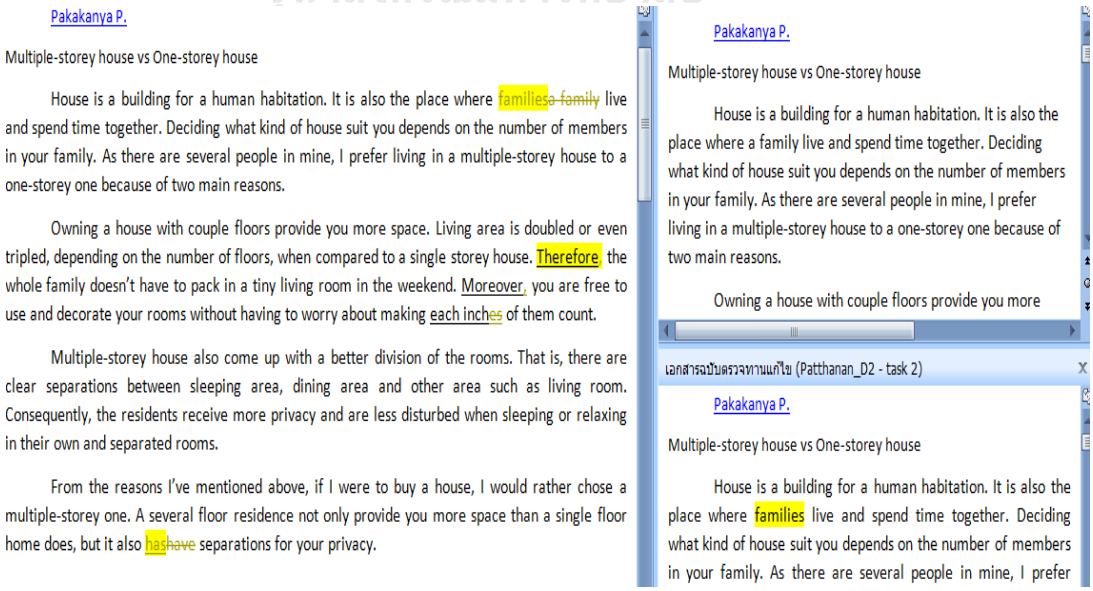



*Figure 5 Example of high proficiency student's self-initiated revisions*

In the writing sample above, student who took passive stance during the interaction made one change that followed peer' s suggestion. This means that although he did not continue the interaction, he revised according to peer' s comment. In the third paragraph, the high proficiency student writer made change according to peer by substituting the word 'using' with 'planting' while the rest of his revisions were initiated by the student writer. That is, he decided to revise his own writing after having to reread his essay. First, he replaced words with ' which' to modify the content before it. In the third paragraph, he revised by substituting the plural verb form with the one for singular subject. Moreover, the plural noun that followed 'every' was replaced by its singular form. In his conclusion paragraph, he also addressed grammatical error by substituting 'the number of' with 'the amount of' to precede the uncountable noun 'pollution'. These revisions were made by the student writer' s own decision. The following writing sample will illustrate how student writer with high proficiency incorporated peer feedback into revisions (peer-initiated revisions).




Pakakanya P.

Multiple-storey house vs One-storey house

House is a building for a human habitation. It is also the place where families~~a family~~ live and spend time together. Deciding what kind of house suit you depends on the number of members in your family. As there are several people in mine, I prefer living in a multiple-storey house to a one-storey one because of two main reasons.

Owning a house with couple floors provide you more space. Living area is doubled or even tripled, depending on the number of floors, when compared to a single storey house. Therefore, the whole family doesn't have to pack in a tiny living room in the weekend. Moreover, you are free to use and decorate your rooms without having to worry about making each inch~~es~~ of them count.

Multiple-storey house also come up with a better division of the rooms. That is, there are clear separations between sleeping area, dining area and other area such as living room. Consequently, the residents receive more privacy and are less disturbed when sleeping or relaxing in their own and separated rooms.

From the reasons I've mentioned above, if I were to buy a house, I would rather chose a multiple-storey one. A several floor residence not only provide you more space than a single floor home does, but it also has~~have~~ separations for your privacy.

Pakakanya P.

Multiple-storey house vs One-storey house

House is a building for a human habitation. It is also the place where a family live and spend time together. Deciding what kind of house suit you depends on the number of members in your family. As there are several people in mine, I prefer living in a multiple-storey house to a one-storey one because of two main reasons.

Owning a house with couple floors provide you more

เอกสารฉบับตรวจทานแก้ไข (Patthanan_D2 - task 2)

Pakakanya P.

Multiple-storey house vs One-storey house

House is a building for a human habitation. It is also the place where families live and spend time together. Deciding what kind of house suit you depends on the number of members in your family. As there are several people in mine, I prefer

*Figure 6 Example of high proficiency student's peer-initiated revisions*

From the sample of high proficiency student's writing above, although her interaction pattern was identified as novice, only one from five changes in student's revisions was found to be initiated by the student writer. This final draft demonstrated how the high proficiency student incorporated peer feedback into her revisions by adding a comma after 'therefore' and 'moreover'. She then substituted a plural noun 'inches' with singular noun 'inch' that followed 'each': The student writer also incorporated her peer's suggestion by substituting the verb form to agree with its subject.

As for those with intermediate proficiency, they also focused mainly on revising their writing regarding grammar in both writing tasks. More than half of their revisions in both tasks were also found to be initiated by students' own decision rather than peer feedback. The following writing sample shows how intermediate proficiency student who took passive stance during online interaction mainly revised by her own decision.

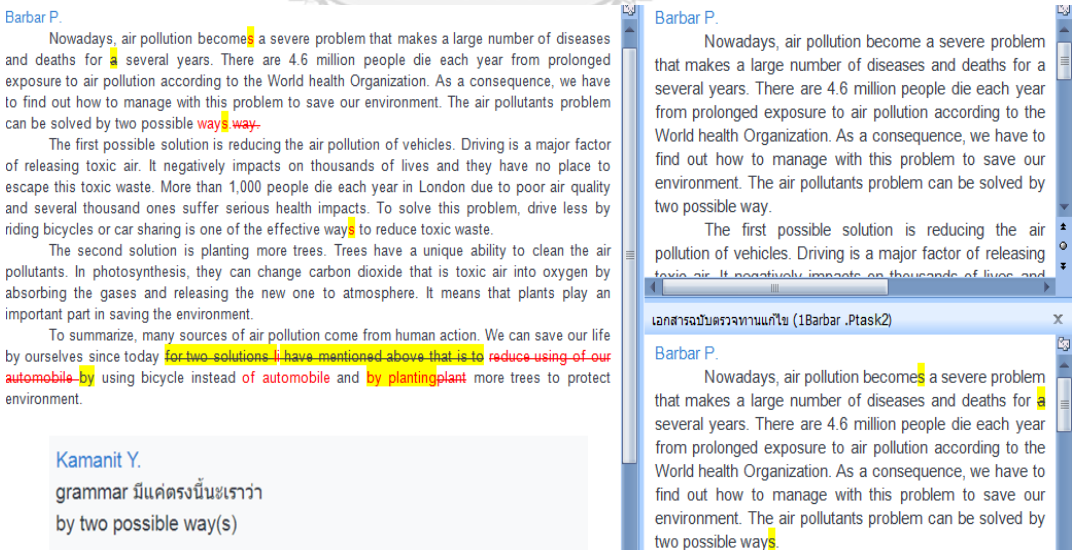
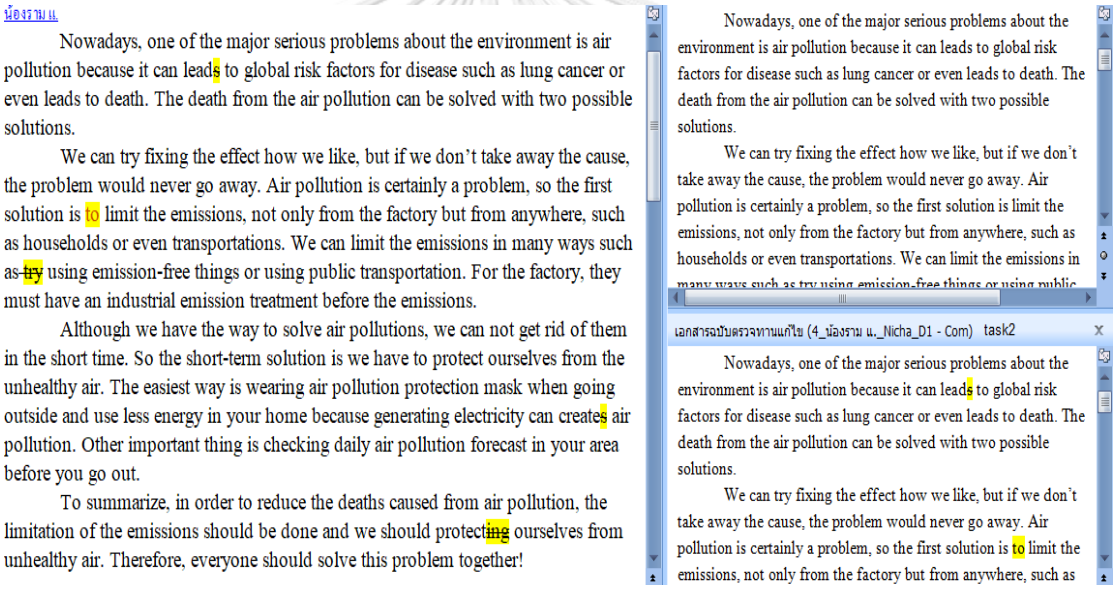



*Figure 7 Example of intermediate proficiency student's self-initiated revisions*

From the example above, seven changes were found in student' revisions, only one change was initiated by peer. This showed that she could individually improve her essay when being allowed to reread her writing. To illustrate, the results identified five changes about grammar: changing the plural verb form to agree with its subject, using article, substituting singular noun with the plural one, and using gerund after preposition. Other two changes involved reorganising content. The following writing sample shows how an intermediate proficiency student incorporated her peer's suggestion into her revision.



น้องราม แ

Nowadays, one of the major serious problems about the environment is air pollution because it can leads to global risk factors for disease such as lung cancer or even leads to death. The death from the air pollution can be solved with two possible solutions.

We can try fixing the effect how we like, but if we don't take away the cause, the problem would never go away. Air pollution is certainly a problem, so the first solution is to limit the emissions, not only from the factory but from anywhere, such as households or even transportations. We can limit the emissions in many ways such as ~~try~~ using emission-free things or using public transportation. For the factory, they must have an industrial emission treatment before the emissions.

Although we have the way to solve air pollutions, we can not get rid of them in the short time. So the short-term solution is we have to protect ourselves from the unhealthy air. The easiest way is wearing air pollution protection mask when going outside and use less energy in your home because generating electricity can creates air pollution. Other important thing is checking daily air pollution forecast in your area before you go out.

To summarize, in order to reduce the deaths caused from air pollution, the limitation of the emissions should be done and we should protect~~ing~~ ourselves from unhealthy air. Therefore, everyone should solve this problem together!

Nowadays, one of the major serious problems about the environment is air pollution because it can leads to global risk factors for disease such as lung cancer or even leads to death. The death from the air pollution can be solved with two possible solutions.

We can try fixing the effect how we like, but if we don't take away the cause, the problem would never go away. Air pollution is certainly a problem, so the first solution is limit the emissions, not only from the factory but from anywhere, such as households or even transportations. We can limit the emissions in

เอกสารฉบับตรวจทานแก้ไข (4_น้องราม แ_Nicha_D1 - Com) task2

Nowadays, one of the major serious problems about the environment is air pollution because it can leads to global risk factors for disease such as lung cancer or even leads to death. The death from the air pollution can be solved with two possible solutions.

We can try fixing the effect how we like, but if we don't take away the cause, the problem would never go away. Air pollution is certainly a problem, so the first solution is to limit the emissions, not only from the factory but from anywhere, such as

*Figure 8 Example of intermediate proficiency student's peer-initiated revisions*

In a collaborative dyad, most of Ram' s changes followed her peer' s suggestion. To illustrate, she changed the plural verb form into infinitive after the modal verb 'can', replaced gerund with infinitive, removed redundant word, and substituted gerund with infinitive after the modal verb 'should'. However, she did not follow her peer's reviewer who suggested replacing 'try fixing' with 'try to fix'. In

doing so, the student writer provided reason to her peer that she did not want to convey the meaning of putting effort as her peer had commented. The following writing sample shows how student writer with low proficiency mainly revised by herself.

In the writing sample below, Mycro, whose interaction was identified as collaborative, had self-initiated revision. He focused on deleting confusing content in the first paragraph. He then reorganised the content in the third paragraph by including more detail in the topic sentence. In his last paragraph, he followed his peer feedback by making the conclusion part more specific, restating two main solutions, and deleting irreverent content. Although he decided to revise the conclusion part as peer had suggested, he made all changes with his own decision.

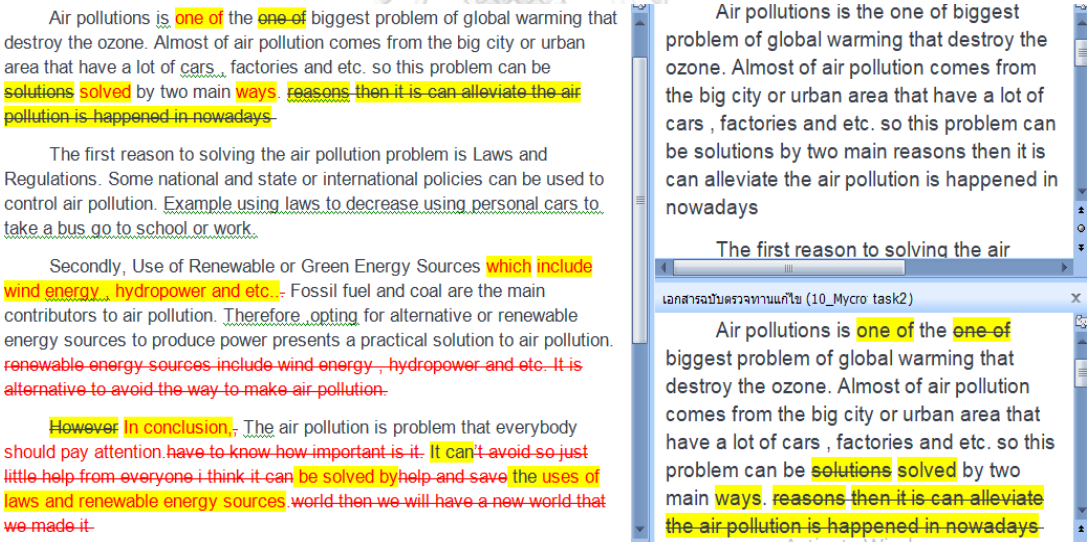



*Figure 9 Example of self-initiated revision of student with low proficiency*

The writing sample below illustrates the compared draft of low proficiency student who took novice stance during the interaction.

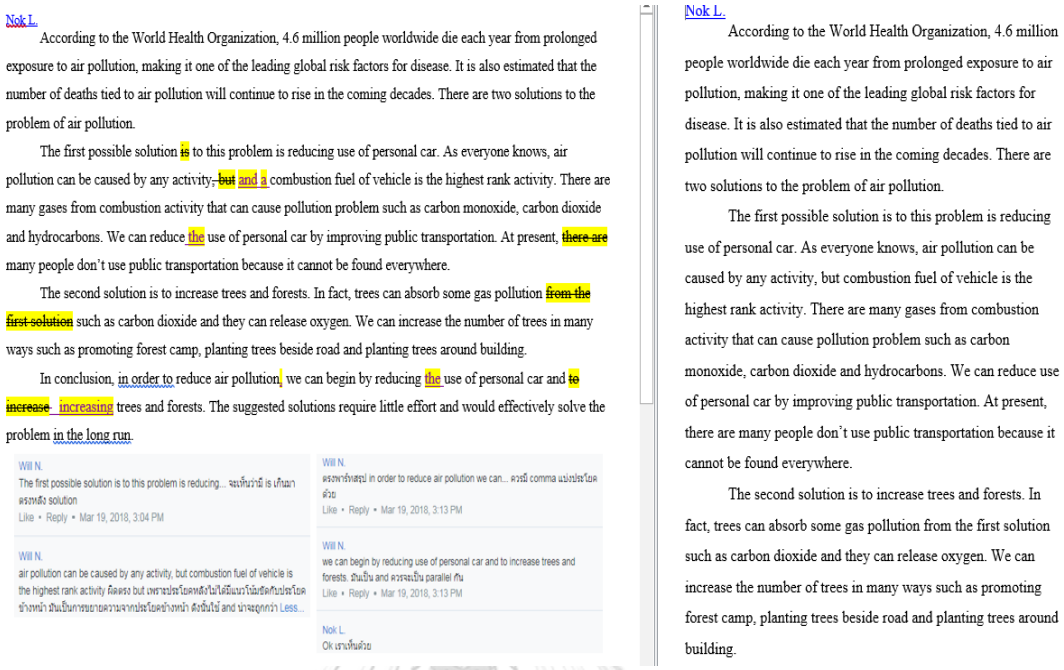



*Figure 10 Example of peer-initiated revision of student with low proficiency*

In this sample of writing, apart from adding article and deleting modifier part, the student writer mainly focused on revising grammar as he incorporated all peer feedback into his final draft. To illustrate, he deleted redundant verb as his peer reviewer had suggested. He also followed his suggestion by replacing conjunction word, adding necessary punctuation, and *making* each idea in his *sentence* follow the same *grammatical* pattern. His revisions were made according to what he had agreed to revise during the online interaction.



## Summary

The findings of this part indicated the effects of the online peer feedback on students' writing. The overall of students' writing scores between the first and the

final drafts of both writing tasks revealed that the participants did improve their writing. The qualitative analysis of students' comments and revisions revealed that although not as many self-initiated revisions were identified as those of the high and intermediate proficiency levels, more than half of students with low proficiency were also found to be initiated by self rather than peer. This demonstrated that the improvement of their writing was not mainly impacted by peer feedback but students' self-initiated revisions held a major part in their writing improvement.

### 4.3 What are the students' attitudes toward intensive peer feedback training and electronic peer feedback?

Students' data, which were collected using google questionnaire, involved questions showing students' degree of agreement and disagreement toward the peer feedback training and online peer feedback. The data were analysed and generated in percentage. The number of students from each category was divided with the entire population and multiplied the result by 100 to convert it into a percentage. The results of this part of the study, shown in Table 24, illustrate a positive attitude of respondents toward the activities.



*Table 24 Results of students' attitude towards training & anonymous online peer feedback*

| Questionnaire items | Mean | S.D. |
|---|---|---|
| Q1: Online peer feedback activity was suitable for an English integrated skills course. | 4.37 | 0.72 |
| Q2: Online peer feedback improved my writing in general. | 3.9 | 0.84 |

| | | |
|---|---|---|
| Q3: Online peer feedback increased interaction among classmates. | 3.67 | 0.80 |
| Q4: Online peer feedback minimised the effect of peer pressure because I did not have to reveal my identity. | 4.63 | 0.72 |
| Q5: Online peer feedback enabled me to revise my writing. | 3.63 | 0.77 |
| Q6: I took time to read and reflect on my peer's online feedback. | 4.13 | 0.78 |
| Q7: I trusted in my peer's online feedback. | 3.27 | 0.94 |
| Q8: Online peer feedback activity enabled me to give honest feedback to peer. | 4.47 | 0.69 |
| Q9: It was easy to give and receive online feedback through an online platform. | 4.63 | 0.61 |
| Q10: The time it took from doing online peer feedback justified the benefits of the activity. | 4.03 | 0.86 |
| Q11: The intensive peer feedback training developed my skills in providing feedback. | 4.43 | 0.57 |
| Q12: I provided useful feedback to my peer after I had been trained. | 4.33 | 0.61 |
| Q13: The intensive peer feedback training developed my skills in providing useful questions for writing revision. | 4.07 | 0.69 |
| Q14: I provided useful questions to my peer after I had been trained. | 3.77 | 0.73 |
| Q15: I learned how to ask question that lead to my | 4.07 | 0.64 |

| | | |
|---|---|---|
| peer's revision after I had been trained. | | |
| Q16: I was more confident in my ability to provide useful feedback after I had been trained. | 4.2 | 0.66 |
| Q17: I could encourage my peers to revise their written work after I had been trained. | 3.73 | 0.64 |
| Q18: I was more confident in my ability to ask useful question after I had been trained. | 4.27 | 0.64 |
| Q19: The intensive peer feedback training enabled me to trust my peer's feedback. | 3.83 | 0.75 |
| Q20: The intensive peer feedback training had provided me with effective strategies that I could apply to give useful feedback. | 4.4 | 0.65 |

To sum up, most of students agreed that they had less pressure providing peer feedback. However, a small number of students did not trust their peers' comments and did not think that online peer feedback increased the interaction among classmates.



**Students' interview questions**

To gain more insight into students' attitudes, eighteen respondents who were selected for an interview involved six combinations of students' proficiency levels: 1. high-high, 2. high-intermediate, 3. high-low, 4. intermediate-intermediate, 5. intermediate-low, 6. low-low. Their interviews were recorded and transcribed in full. In analysing the interview data, several themes emerged from five interview

questions. They will be discussed in this section in relation to respondents' proficiency combinations.

**4.3.1 Interview question one**

**How an online peer feedback, especially when giving it anonymously, impacted how you provide feedback to peers?**

The first interview question revealed that providing an online feedback anonymously had no impact on how students with high proficiency generated feedback for their similar and intermediate levels peers. The high proficiency students showed no stress in revealing their identities when generating critical comments.

Nevertheless, the finding further revealed that providing anonymous feedback could encourage students from other proficiency combinations to provide feedback. For example, unlike the high proficiency combinations that revealed no difference in using anonymous, the low and intermediate proficiency students could provide critical and honest feedback because they did not have to reveal their identities during peer feedback tasks. This was due to three following reasons. First, they felt less pressure in identifying peers' errors because they were less worried about having hard feeling towards their classmates. Moreover, intermediate and low proficiency respondents also expressed their relief when they did not have to use their real name to comment. " It was good that I could use an anonymous name… I edited nearly every line of the essay. I mean he would never know who to be angry with." (intermediate proficiency reviewer – low proficiency writer). "It was a relief for me. I could show my disagreement in comment because my identity had been kept in secret." (low proficiency reviewer-intermediate proficiency writer). Moreover,

providing feedback anonymously enabled the participants to comment because they did not have to care much about losing face. To illustrate, student with intermediate proficiency in an intermediate-high levels combination admitted that he was not afraid of giving feedback although he was not certain about the correctness of his comments. Moreover, students with low proficiency level in a low-high levels combination further informed that her comments could be read by anyone in the class, not only the writer. Therefore, providing feedback anonymously ensured the sense of privacy and kept her from losing face during the online peer feedback activity.

Lastly, providing feedback online outside of class time allowed participants, especially low proficiency students, to provide more feedback as they had more time to read their peers' writing. Students with low proficiency levels reported that they need time to think about what they should comment. In summary, providing anonymous feedback online did not have an impact on the way students with high proficiency commented on their peers who had the same proficiency level and those with intermediate level. However, it encouraged students of other proficiency combinations to provide feedback as they had less pressure in pointing out errors. Moreover, they were not afraid of losing face and that they could achieve the activity at their own pace outside of class time.



**4.3.2 Interview question two**

**How did you interact with peer during an online peer feedback?**

In analysing the second interview question, it was found that students of all proficiency levels preferred to identify all errors at once and waited for peer to respond to the comments. The following quotations represent the typical opinion of

students with high and intermediate proficiency levels who commented on the peers with the same proficiency levels: “ I provided all I wanted to say at once and the student writer simply thanked me. The interaction ended there. I do not think we had much to talk because my comments were already clear. . . Umm, actually I thought that the students writer made errors because he or she did not recheck essay, not because of the lack in knowledge…so, there was no need to talk much about that.” (high proficiency combination).

Among all combinations, this study found that an intermediate proficiency student provided corrective feedback to his lower proficiency peer by editing essay, posting it as a picture on the online platform, and waiting for peer’s question. When he was asked to explain why he did not type his comments like other students, he reported that it was easier for him to achieve the task. As for the participants who used questions during their interactions, they reported using them for two main purposes. First, students with high and intermediate proficiency levels used clarification and/ or problem solution questions to identify errors along with encouraging the student writer to clarify and/ or to reflect on his/ her essay. The following quotations represent the opinion of the intermediate student: “ I used question because I wanted to check if my friend agreed with my comment and to decide if there was a need for revision. Sometimes, I was not sure if my feedback was entirely correct, so I wanted the writer to clarify before making any revision.” The low proficiency student also used question because she could not identify any error on her high proficiency peer. “To be honest, the essay was already good, so I was not sure umm… what I should correct, so I simply used question rather than identifying his error.”

In summary, most students informed that they preferred providing all feedback once but they were willing to negotiate meaning with the student writer if necessary. Moreover, questions were used along with directive suggestions to prompt reflection from the student writer. However, the low proficiency student used questions to hide her inability to comment on the high proficiency peer. In addition, the intermediate student explained that the writing contained too many errors, so he submitted his online feedback as a picture that showed all corrective comments on his lower proficiency students' essay.

**4.3.3 Interview question three**

**What do you think about the intensive peer feedback training that we had before giving comment to your peer's writing?**

In analysing the third interview question, the data revealed that most of all proficiency respondents who participated in the intensive peer feedback training supported it. They regarded it as a useful activity that helped them to begin the task and to learn how to generate feedback on their peers' writing. Moreover, the intermediate and low proficiency students reported that the intensive peer feedback training introduced them to the concept of writing process. Most of the respondents admitted that they had never been exposed to the notion of peer feedback and revision process prior to the training. "I was not sure if classmates should be allowed to read my writing. I did not know how much they could help. Err… it should be the instructor who could read my writing. After I had been trained to provide comment to my friends, I sort of understood that may be, we could help one another too." – Low proficiency.

However, they informed that the intensive training was quite limit in terms of the training period. Although students reported that the training was helpful, they found that they should have received more practice in providing peer feedback. In summary, the intermediate and low proficiency students found the training useful for guiding them to provide peer feedback. Since they had never been trained prior to this study the respondents also reported being exposed to the concept of writing process which enabled them to revise and resubmit their work. However, all proficiency students suggested that the time for peer feedback training was brief for the duration of two sessions.

**4.3.4 Interview question four**

**What do you think about using peer feedback activity in this English integrated skills course?**

In analysing the fourth interview question, the data indicated positive attitude of respondents of all proficiency levels towards using peer feedback in the English integrated skills course. To illustrate, students reported that using peer feedback in the course could develop their writing skill.



Moreover, students suggested that more time is needed for using peer feedback in the course. " Peer feedback would be more effective if it was incorporated into the writing course. Or else you should give me more time to provide feedback on two essays. Umm…It was very…rush. What I mean is that I was asked to provide feedback immediately after the end of the training, so…you know, I need more time to digest. If I only had to focus on improving my writing, then it would work well." - Intermediate proficiency.

In summary, most respondents had good attitude towards using peer feedback in the course. They reported that their writing could be developed to some extent; having opportunities to read others' written work and recheck their own writing. However, the respondents suggested that more time is needed for the activity to be organised effectively.

**4.3.5 Interview question five**

**What challenges did you have when providing anonymous online feedback?**

In the interview, the data revealed three main issues about students' challenges in peer feedback activity. First, low proficiency students admitted that they found it hard to comment on their peers' essay even after they had received the training. "I really had no idea what part should I provide feedback on because my friend's writing looked already good and perfect. I think I commented on the part that was not actually an error and my friend did not say anything about it." (low proficiency reviewer - high proficiency writer). Moreover, students in this study found it hard to concentrate on completing the task outside of class time. They felt that they had additional assignments. Students with high proficiency also admitted that they did not pay much attention to the task because of the upcoming examination. Another challenge for peer feedback activity was that many students failed to interact. The respondents informed that they did not receive any answer or response from their peers. When the low proficiency students were asked why they did not provide answer to their peers' comments, they explained that the feedback that they received was already clear, so they need no further interaction.

In summary, the student reviewers with low proficiency had difficulty in providing comments on their higher proficiency peers while the latter had to be reminded because they forgot to complete the activity due to several subjects that they had to focus. Respondents in this study explained the lack of negotiation for meaning during the interaction because of an already well-informed feedback from the reviewer.

# CHAPTER 5

# DISCUSSION

The purpose of this study was to investigate how students' online interactions during their peer feedback sessions could lead to their writing improvement. Moreover, it also explored students' attitudes toward the peer feedback and the intensive training. This chapter includes a discussion of major findings as related to the literature on peer feedback and what implications may be valuable for use by researcher in the field of writing instruction along with instructors who would like to incorporate an online platform into peer feedback tasks. Also included is a discussion of social constructivism theory in relation to peer feedback activities. The chapter concludes with a discussion of the limitations of this study and areas for further research.



This chapter contains discussion and future research possibilities that address the following research questions:

1. What are the patterns of interaction during peer feedback sessions between student pairs?
2. What effect does the electronic peer feedback have on the outcomes of students' writing?
3. What are the students' attitudes toward intensive peer feedback training and electronic peer feedback?

## 5.1 Students' interaction during online peer feedback activity

This section discusses the results for the first research question: (1) what are the patterns of interaction during peer feedback sessions between student pairs?

This study involved thirty first-year students who completed two online peer feedback tasks in an English integrated skills course. Students' interaction patterns in this study could be classified into five categories. Adapted from Storch's (2002) interaction patterns that were used to analyse students' interaction in a collaborative task in terms of how the students showed engagement with each other's ideas and the extent to which they participated in the task. An additional category (expert/passive) was added into the students' interaction patterns in this current study.

In Storch's (2002) study, the student writer had passive interaction pattern when they were paired with the student reviewer who dominated the interaction. Unlike Storch's (2002) study, the findings of this research suggest that the student writer also took passive role when being paired with the student reviewer who had expert stance. That is, although student reviewers did not try to dominate the interaction, there was also a lack of interaction from the student writer as in the dominant/passive interaction pattern.

In the first task, dominant/passive was the predominant pattern in students' interaction followed by expert/novice, collaborative, expert/passive, and dominant/dominant patterns. This finding is inconsistent with what has been found in previous studies in which collaborative was the most common interaction pattern (Roberson, 2014; Storch, 2002; Watanabe & Swain, 2007). In this study, student reviewers tended to provide corrective feedback on their peers' writing without attempting to engage the student writers into the interaction. They regarded peer

feedback activity as a task to identify errors in their peers' writing. As for the passive writers, they did not mention anything about the comment received. From the interviews, one common explanation from the student writers who took passive stance was that they did not negotiate for meaning from the comments because they already understood their peers' comments and decided to revise according to peers' suggestions.

However, in the second task, this study showed positive result as students interacted more collaboratively by engaging during the interaction more than they did in the first writing assignment. The collaborative stance was found to be dominant in their interaction followed by expert/novice, dominant/passive, and expert/passive patterns. It is notable that the co-construction of knowledge is more likely to occur in student dyads who interacted collaboratively. In a collaborative dyad, the student reviewer identified errors along with providing suggestions on how to make revisions while the student writer, in replying to feedback, actively engaged by clarifying ideas and asking the reviewer for clarification. Moreover, instead of simply providing corrective feedback on the writing, the collaborative reviewer expressed uncertainty of the feedback to instigate a discussion on what should be revised.



For both tasks, the next common stance that students had was expert/novice, a similar pattern of results that was found in Roberson's study (2014). The reason that expert/novice was common interaction pattern in both tasks could be explained in relation to the role of collectivist culture (Gelb, 2012; Lu & Bol, 2007). In this study, the student writers who took the novice stance reported that they did not want to cause any conflict even when they disagreed with the comments that seemed incorrect to them. The results of this study align with Ho

and Savignon (2007) which indicate that Asian students might not feel comfortable providing feedback on their peers' writing as they are worried about the effects of their actions to their peers. The role of collectivist culture was further highlighed as the students in this current study rarely took dominant/dominant interaction pattern. Only one pair of students was identified as having dominant/dominant interaction pattern showing that the majority did not show disagreement with their peers.

Among all students' interaction patterns, the findings of the study revealed that most student reviewers generated all comments in a row, mentioning all the errors that they could identify at once without waiting for their peers to respond one by one. When comparing the results to Storch's (2002) study, it must be pointed out that students' interactions in this study were very brief even if they interacted in their first language. One explanation was attributed to how students provide peer feedback. To illustrate, the students in this current study interacted online, they did not verbally discuss each other's papers as in Storch's (2002) study. Consequently, although this study adapted the classification of Storch's (2002) interaction framework, there was a difference in terms of the length of students' interactions.



**5.1.1 The use of questions during peer feedback activity**

In accordance with Swain, Brooks, and Toealli-Bcller (2002), this research illustrated that the students used questions to support peers on making revision. In this study, the student reviewers with high and intermediate proficiency levels tended to use questions for two mains purposes. First, instead of providing only corrective feedback, the student reviewers used questions to encourage their peers to clarify their own writing. Moreover, this research found evidence on how the collectivist culture played a role in Thai students' interactions as students were

found using more questions to avoid conflict when commenting on peers' work even when they were asked to provide feedback anonymously. To illustrate, questions were used to politely identify errors and to encourage student writers to focus and become aware of their own errors.

As for low proficiency reviewers, they could provide comments for the student writers who had the same proficiency level, but they could not identify many errors in their higher proficiency students' writing. This explained why the low proficiency reviewers provided feedback in the form of clarification question to their higher proficiency writers. As the findings of this study revealed, when the low proficiency students could not detect many errors in their higher proficiency peers' writing, they chose to ask high proficiency writers to further clarify parts of the writing, which did not lead to revision. Moreover, while the problem-solution questions generated by those of high and intermediate levels served to politely address problems in the writing, the low proficiency level mainly used this type of question to express their uncertainty of what they had identified as errors. This let the student writers know that the comments received might not be entirely correct and consequently engaged the writers to decide for themselves on how they should make their own revisions.



**5.1.2 Students' proficiency combinations and a shift in their interaction patterns**

With regard to students' stances during peer feedback, the findings of this study suggested that English proficiency level did not necessarily designate students' interaction pattern. To illustrate, in one high-low proficiency dyad, the low proficient student took an expert stance by providing suggestions to her higher proficiency counterpart while the latter took the novice stance when receiving feedback by

acknowledging the help. However, when receiving comments from the high proficient student, the low proficient student was identified as taking the novice stance.

This study further suggests that the higher proficiency level does not necessarily mean students' taking an expert stance or dominating the interaction when reviewing peers' writing. As in the high/intermediate dyads, the intermediate student reviewers were identified as having expert and dominant interaction patterns while their higher proficiency peers took passive and novice stances in each writing task. Moreover, this study reveals that the expert/novice interaction patterns were dominant in the high-low student dyads in both writing assignments. That is, the high and low proficiency students took turns taking expert and novice stances during their interactions.

From the results, it is possible for all proficiency students to take any interaction stances during online peer feedback tasks. Regardless of their proficiency level, students could provide suggestions when they generate feedback to their peers. The quality of feedback, however, will be discussed in the second research question section as the assigned combination of students for the peer feedback activity was an important factor affecting how they chose to interact with one another.

### 5.1.3 Challenges in students' interaction during peer feedback

There were three main challenges found in this study: students' lack of collaborative interaction, the differences in proficiency levels, and the lack of motivation. One of the major findings in this current study reflected the role of students' collectivist culture during peer feedback interaction. As the findings

suggested, providing feedback anonymously gave them the courage to work on identifying errors in peers' writing. When receiving feedback, however, students admitted that although they did not agree with some parts of comments, they chose not to raise the issue or continue the interaction for fear of causing unintentional conflict even though their identities were not revealed. To illustrate, although the students interacted more collaboratively in the final assignment, many students' interaction patterns were identified as dominant/passive while only those of low proficiency dyads and intermediate dyads interacted collaboratively in the first writing assignment. Therefore, further study should focus on training students not only to provide critical and constructive feedback on peers' writing, but also to express their disagreement when deciding not to incorporate peer feedback.

This study also indicates that the difference in proficiency levels of student writers and reviewers inhibited them from interacting collaboratively. This was illustrated in the high-low proficiency combination. While high proficiency reviewers were able to make detailed comments including corrective feedback on how their lower proficiency counterparts should make revisions, the latter seemed to have difficulties in giving feedback to their higher proficiency peers even when they were encouraged to comment on global areas such as content and organisation. Therefore, more emphasis should be given on training students to place major emphasis on global areas. Also, more attention should be paid to the planning and arrangement of proficiency levels into dyads.



Another challenge arises in terms of students' lack of motivation to accomplish the task. As peer feedback was used as a supplement activity for developing students' writing skill, students did not receive any scores for participating. Although they reported that the peer feedback was beneficial, they did

not regard it as an obligatory task when comparing with other assignments. Moreover, the activity was done outside of class time without close supervision. It then implies that students' lack of motivation appears to be a case of their brief interaction in this study. This suggests that although peer feedback could support students' revision, it would be more effective incorporated in a writing course. In addition, to highlight the importance of peer feedback and to cultivate cooperative culture in Thai students, the activity should be included in the course syllabus. In addition, this study maintains that to be able to learn from peer feedback, the students should have several practices to strengthen their skills in giving and receiving feedback. With increased practice, they should get used to the activity and be more open in discussing their written work with peers.

## 5.2 Students' online feedback and their revisions

This section discusses the results for the second research question: (2) what effect does trained electronic peer feedback have on the outcomes of students' writing?



### 5.2.1 Areas and quality of peer feedback

The results demonstrate that students' areas of feedback might not be entirely related to their language abilities as the number of comments regarding grammar was found to be higher than other areas among all proficiency levels. This study found that the students of all levels mainly provided corrective feedback on grammar in both of their writing assignments. In line with previous studies (Chang, 2012; J. Liu & Sadler, 2003), the linguistic elements such as wording, grammar, and punctuation were the most dominant areas in students' comments. This could be

because grammar was also found to be the most prominent type of error found in their writing. Moreover, low proficiency reviewers reported that it was easier for them to spot minor errors such as punctuation missing, capital letter and misspelling.

However, there was a shift of students' attention from commenting on surface errors such as punctuation and capital letters to a more in-depth level, which was the content of their peers' essay in Writing-task Two. In the second assignment, participants generated less feedback regarding grammar and vocabulary, but provided more comments on content and organisation. Particularly, those who had high and low proficiency levels generated more feedback regarding content in the second task.

This shift of students' focus may suggest two things: that the students in this study could develop skill in addressing 'high-order' writing issues (Min, 2005) at the meaning level rather than the surface one; or it was easier for them to look briefly at the content rather than detailed linguistic elements. Both interpretations appear plausible since the students reported that identifying errors at the meaning level encouraged them to revisit the content of their own essays and that looking briefly at their peers' content saved them time to focus on other subjects coming for the final examination.

This study also reveals that while students paid more attention to the global area, namely content, relatively few comments in this study recommended changes in organisation. This might be attributed to the fact that the structure of each essay genre was clearly explained to them during the essay session and that the writing assignment required them to write only three paragraphs. Moreover, the examples of how to use appropriate transitional devices were already given in their textbook, so

they did not have much difficulty in selecting some that were appropriate for their written work.

As regards the nature of students' feedback, the findings of this study corroborated with Liu & Sadler' (2003) study, revealing that the majority of comments were considered as revision-oriented. This suggests that the student reviewers in this study were able to provide comments and suggestions that prompted the student writers to revise their writing. However, the proportion of revision-oriented comments did not guarantee the quality of students' feedback.

In fact, findings in this study demonstrated that low proficient students generated more incorrect feedback than other proficiency levels in both writing assignments reflecting the lack of quality in the comments they have given, which was to be expected. Nevertheless, this study shows that students of all proficiency levels improved the quality of their comments as the amount of feedback showing their mistakes decreased in the final task. This finding, therefore, advocates the use of peer feedback as opportunities to practice identifying errors in peers' writing so that peer reviewing skills could be transferred to self-revision skills when revising their own writing.



In line with previous studies (Liou & Peng, 2009; Lundstrom & Baker, 2009; Min, 2005, 2006), this research highlights the importance of training students prior to the peer feedback activity. It suggests that the training could help students who have never provided feedback to their peers to get an overall picture of how to begin, what parts they should focus on, and what kinds of feedback should be avoided. That the student improved the quality of their comments from the first task to the final one in this study shows the need for hands-on practice and the guiding prompt during the training, which is also what Min (2005) suggests. In Min's study, it is

proposed that students who receive training can identify errors and provide specific comments. Naturally, students should have opportunities to practice giving feedback before they could give feedback to their classmates. Thus, by having several practices, students will be more confident in their ability to give feedback and may be able to provide higher quality feedback on their peers' written work.

### 5.2.2 Anonymity aspect in peer feedback

The finding of this current research supports previous studies which stressed the importance of anonymity in peer feedback (Cho & Schunn, 2007; Lu & Bol, 2007). The findings of this study illustrated that high and intermediate proficiency students had no difficulties in identifying errors in peers' writing. They could make useful suggestions that prompt their peers to make successful revision. As for those of low proficiency level students, providing feedback without having to reveal their identities helped them to feel less awkward in giving suggestions to their counterparts with regard to their written work. Although they reported that it was difficult for them to identify errors in their higher proficiency peers' writing and that they were not certain about the correctness of their comments, the low proficiency students showed effort in making suggestions because they did not have to reveal their identities to their counterparts. Moreover, students among all proficiency levels reported having less pressure in pointing out each other's errors, regardless of their proficiency level. This suggests that students should be allowed to provide feedback anonymously as it could support them to be more critical and to have less pressure in commenting on each other's written work.

**5.2.3 Areas and quality of changes in revisions**

In relation to feedback, findings of this study revealed that students focus on grammatical issues was prevalent in students' revisions of all proficiency levels. This, however, did not corroborate with previous research studies. Unlike Min' s (2006) study which suggested that grammatical change was less common among student writers, this current research indicated that grammatical change was more common among students of all proficiency levels. Moreover, the students in this study rarely made revision on organisation. This finding was in common with the feedback finding in this study, suggesting that students also focus less on commenting about organisation. In terms of students' operations, the findings of this study corroborated with previous research (Min, 2006) that explored revision, indicating that the students used substitution most frequently. That is the student writers tended to replace old information or what had been identified as errors with new content.

Regarding the quality of students' revisions, most of students' changes between drafts improved the quality of writing among all proficiency levels for both writing tasks. However, this study showed that more than half of students' revisions involved changes that were initiated by the student writers themselves. With respect to the peer-initiated revisions among all proficiency levels, this study revealed that the low proficient students could improve the quality of their written work more than other two proficiency levels in the first writing task while the intermediate proficient students showed more improvement in the final assignment. This finding was in line with Lundstrom & Baker's (2009) study which indicated that the low proficiency student writers had more room to develop their language skills, so they could make more gains than those at higher proficiency levels in peer feedback activity.

Regarding the self-initiated revisions, the high proficiency could improve the best in both writing assignments. This suggested that the high proficiency students could revise their own written work better than revising according to peer feedback. The findings of this study suggested that the low and intermediate students could benefit most from the peer feedback activity while the high proficiency student worked best when being allowed opportunities to revise on their own. As most of students' revisions that were triggered by both peer and self could lead to text improvement, this study suggests that peer feedback had both direct and indirect impact on students' writing improvement. From the result, peer feedback activities could support the students to revise according to their peer's comments as well as encourage them to reflect on the errors identified and make their own decisions as whether to make any adjustments.

**5.2.4 Self-initiated revision vs. peer-initiated revision**

The findings of this study suggested that students' revisions improved the quality of their writing significantly. While this study indicates that corrective peer feedback could lead student writers to make revision (peer-initiated revisions), particularly those of low proficiency students, it also suggests that student writers could revise on their own (self-initiated revision) by simply being engaged in the task.

To shed more light into how peer feedback could support the students to improve their written work, the proportions of peer-influenced revisions in total revisions were investigated. In contrast to students' revisions that were mostly initiated by peers' comments in Min's (2006) study, it is interesting to note that more than half of the total revisions in the current study were triggered by the students themselves.

Based on Ting & Qian' (2010b) study that also investigated students' revisions in terms of the source of revisions, self-initiated revisions refer to those that were triggered by self-discovery and/or by learning from being exposed to peers' essay. In this study, self-initiated revisions further involved cases where errors were identified by peer reviewers but student writers did not revise according to their suggestions. Instead, they made their own decisions as to how they would revise. Moreover, self-initiated revisions in this current study were also triggered by peers' questions. That is, student reviewers used questions to express their uncertainty about whether the point being discussed should be identified as errors and left the student writer to reflect and decide on how to make the revision. Although changes made were indirectly influenced by the peer reviewer's comments or questions, they were identified as self-initiated revisions as they were made because the student writer actively engaged in their writing, reflecting on how to make the revision on their own and not simply following suggestions of their peer reviewer.

**5.2.5 Students' incorporation of peer feedback**

The findings on students' revisions imply that corrective feedback and feedback that was provided with specific suggestions could promote students' likelihood of feedback incorporation. Students' corrective feedback aided those who took a novice interaction pattern, particularly the low proficiency level students, to revise accordingly. Students reported incorporating corrective feedback because it helped them with fixing errors. Moreover, they agreed to revise accordingly because they admitted forgetting to recheck their writing before posting it online. Additionally, student writers who took the passive stance stated that they tended to ignore their

peers' comments when being asked to reflect on errors, but they would rather incorporate corrective feedback because it was easy to follow.

This study also suggests that feedback provided with specific suggestions and explanation encourages the students to make revision. In line with Nelson and Schunn (2009), this current study revealed that student reviewer's feedback that explained errors and provided suggestions or solutions on how to make revisions helped the student writers to understand their errors and proceed to correct their errors. However, the findings of this study did not support Patchan, Schunn, and Correnti (2016), indicating that a solution provided with students' comments did not have an impact on the likelihood of improving text quality. Students of all proficiency levels in this current study reported that they needed to understand their peers' comments before deciding to revise their written work.

## 5.3 Students' attitude toward peer feedback and peer feedback training



The findings of this current study indicates that providing feedback anonymously lessened students' pressure in identifying peers' errors. This supports Lu and Bol (2007) findings. Particularly for lower proficiency level students who had to comment on their higher proficiency counterparts' written work, they were not worried about being identified as lacking ability because their names remained unknown. However, for higher proficiency writers, anonymity in providing online peer feedback did not appear much of an issue. This was because high proficiency students were confident in their ability to give comments to their peers, thus they were not worried about losing face.

In line with Roberson (2014), students' interactions in this current study were brief. Students in this study reported that it was easier to provide all comments in a row and to negotiate for meaning later in case their peers did not understand their comments. While this study suggests that online peer feedback allows students to learn at their own pace, it further illustrates a drawback of an online asynchronous interaction. That is, it was difficult to differentiate if students already understood their peers' comments as they reported or they naturally took passive stance once they regarded the task as completed.

Regarding the questions used in peer feedback tasks, students reported using questions during their online interactions for several purposes. The lower proficiency students reported using questions when they could not find errors on their peers' writing. Moreover, they asked for clarification when they did not understand their peers' intention. Additionally, the higher proficiency students used questions as a way to identify their peers' errors and to encourage the student writer to reread and reflect on their own writing to find the errors.

In line with previous research that focused on training students for peer feedback (Min, 2006), students in this study were satisfied with the intensive peer feedback training that they received before giving comments to peer's. The findings of this study stressed the importance of training students prior to the peer feedback tasks as the students found it highly beneficial for them to focus on each part of their peers' writing. However, they reported that the training was quite brief and that there should be more practice. Thus, it is suggested that students should have the opportunity to practice before providing feedback. As indicated by Cho and MacArthur (2010), providing comments to others' work could help the student

reviewer to improve their audience awareness. While they read others' writing, they could transfer that skill into enhancing their own writing.

Although the purpose of incorporating online peer feedback in an all-skills course was partly for the benefit of time management, allowing class time to be allocated to other significant areas of learning, students in this study indicated that time was still needed for each peer review task. Due to various assignments from other subjects they had to complete, they regarded the peer feedback task of secondary importance and did not give it priority as it was not a mandatory activity stated as part of the course objectives. This study then suggests that peer feedback might be more effective in a writing course as the students will have more time to sharpen their skills in providing feedback to peers. Regarding students' attitude towards the use of peer feedback in the English integrated skills course, students found it positive to be exposed to others' writing and felt that it could support them in developing their own writing skills to some extent.

Challenges that students had when commenting on peers' writing arise in terms of proficiency level. Students of low proficiency level reported having difficulties in identifying their higher proficiency peers' errors. They admitted that they could not find many errors except those minor errors such as capital letters and punctuation errors. Students of low proficiency levels also reported that they could learn from the first peer feedback task that their counterpart was from a higher proficiency level. This speculation somehow inhibited them from commenting for the fear of losing face; even if their names remained unknown to student writers.

## 5.4 Conclusion

Results of this current study aligns with previous studies (Ho & Savignon, 2007; McLeay & Wesson, 2014; Yu, Lee, & Mak, 2016), indicating the influence of the collectivist culture in peer feedback activity. This study found students' collectivist culture illustrated via interaction patterns of the student writer. It further indicates that although providing feedback annonymously aided student reviewers in identifying their peers' errors without having to worry about having hard feelings, it did not encourage student writers to have in-depth discussions on the comments that they received as seen in the dominant/passive category which was found to be the prominent interaction pattern for the first writing assignment. However, this study shows that the students interacted more collaboratively in the final assisgnment.

The fact that the students did not interact collaboratively as much as was found in Storch's (2002) study could be attributed to the nature of the task which was an individual writing task. It did not require students to complete the task collaboratively. To illustrate, the students in this study were required to complete the task individually; they received individual scores for the writing tasks submitted. So, this may have been why student reviewers did not put more effort in making their counterpart correct their written work. Nevertheless, findings of the current study support the social learning theory (Vygotsky, 1978) by illustrating how learning occurred, particularly in those whose interaction pattern were identified as a collaborative one.



This research has also demonstrated that peer feedback supports students of all proficiency levels in improving their essays. In line with Liu & Sadler (2003), surface issues such as grammar was predominant in students' feedback. However, this study indicates a shift of feedback focus from grammar to content in the final

assignment, suggesting that students could develop skills in providing comments on deeper issues. Regarding the quality of comments, low proficiency students provided more incorrect feedback than other proficiency students. However, they were able to improve the quality of their comments in the final assignment which suggests that students should be trained and allowed opportunities to practice identifying errors in peers' writing to sharpen their revision skills.

Moreover, students mainly provided revision-oriented feedback, which prompted student writers to make revision. This finding highlights the role that peer feedback had in advocating the student writer to pay attention to the errors made. This suggests that peer feedback could serve as a 'error identification' tool, allowing opportunities for student writers, regardless of their levels of proficiency, to improve their writing after being exposed to the opinion of their peers.

All in all, these findings underscore Min's (2006) and Roberson's (2014) assertions that students should be trained prior to the peer feedback activity. This study also highlights the significant contribution of hands-on practices and guidance information during the training as students reported being strongly and positively encouraged to focus on the task. Moreover, data in this study support Lu and Bol (2007) by indicating that the anonymity aspect could substantially boost students' confidence and reduce anxiety during the phases of providing and receiving peer feedback.

## 5.5 Implications for theory and research

With respect to the theoretical framework, the findings of this study are in accordance with Vygotsky's (1978b) social learning theory which assumes that

learning is a social process that occurs during interactions between individuals. As alluded earlier in Chapter II, under the social learning theory, students are able to learn and benefit from peer feedback. How the students' interactions during the online peer feedback tasks in this study coincide with the concept of social learning is discussed here. This study maintains that peer feedback activity could serve as a task that prompts and encourages students to co-construct knowledge between the reviewer and the writer. However, when comparing this study's results with Vygotsky's (1978b) social scaffolding concept, similarities and differences exist.

According to Vygotsky, individuals have potential to learn from collaborative dialogue with skillful tutors and regulate their own performance. Simply put, they internalise the information and develop their writing under the guidance from more capable peers. Nevertheless, the results of this study have proven that help does not come exclusively from students who are more capable. Although the drafts of high proficiency students were well-written with students at the same level and students at a lower proficiency having difficulties in identifying their errors, it was found that some low proficiency students were able to identify their higher proficiency counterparts identify minor errors that were overlooked, such as capital letters and punctuation marks. This research then supports the notion of social learning by indicating that any individual could gain benefit from the peer feedback interaction regardless of their English proficiency level.



Moreover, this study shows that students could acquire knowledge during peer interaction. To illustrate, students reported that although they did not show disagreement with comments which they were not certain of, they searched for further information with the aim to confirm if revision according to their peers' feedback was needed. This finding supports Piaget's (1952) cognitive conflict theory

that stressed the importance of social interaction in the co-construction of knowledge by suggesting that although students did not show disagreement with their peers' comments, they could improve their written work by simply being exposed to different ideas during peer feedback tasks.

## 5.6 Implications for practice

1. This study calls for a need for hands-on practice during the training. Even if it is intensive training, students should have opportunities to practice giving feedback on writing samples before they can provide feedback to their peers.
2. The students in this study were able to provide critical feedback to peers; however, they did not continue the interaction even when they did not agree with their peer's feedback. Therefore, to overcome avoidance of confrontation, which is part of the collectivist culture, in an EFL peer feedback context, instructors should provide close monitoring during the activity and encourage students to justify their reasons for deciding not to incorporate peer feedback into their writing.
3. Also, using a synchronous online platform may better promote more students' interaction. In this study, the students' interactions via an asynchronous online platform were short. One possible explanation for this was that counterparts were not present at the same time during the peer feedback sessions. Thus, to promote interaction that is more dynamic and to understand how learning occurs during their interactions, instructors should have students provide feedback synchronously, requiring students to set a schedule so they may interact synchronously.

4. Although, the students in this study were able to benefit from peer feedback regardless of their proficiency levels, it is advisable for instructors to carefully plan when pairing students who differ greatly in proficiency levels. In this study, low proficiency writers gained more from their higher proficiency counterparts, while the latter made better use of feedback from the intermediate level writers and reviewers of the same proficiency level. Therefore, pairing the students should be organised in a way that all would benefit from peer feedback activity.

**5.7 Limitations of the study**

1. The limitation of this study lied in its generalisability. The samples may not be representative of the first-year undergraduate students at Chulalongkorn University because they came in an intact group with no randomisation.

2. This study was also limited by the duration of the research, which took only one semester for data collection in the English integrated skill course. Since the students had to develop all English skills, time could not be devoted to peer feedback activities. They only had two peer feedback sessions out of four writing assignments. Consequently, the improvement in students' writing may not have been exclusively resulted from peer feedback.

3. This study was further limited by its design. Since the objective of this research was to explore students' peer feedback in a natural setting, it did not seek to compare between two groups of students as in an experimental design. Therefore, the findings of this study are descriptive and causation could not be inferred.

**5.8 Recommendations for further research**

1. To have a representative population, future research should include more samples and use a random sampling method. In addition, experimental designs would be necessary to establish the causality of online peer feedback and differences between groups of students.

2. Since Thai students may feel more comfortable to interact and exchange ideas with peers when they are continually exposed to peer feedback, a longitudinal study should be carried out to reveal new insights into long-term effects of online peer feedback on the students' writing improvement.

3. Since many student writers in this current studyinitiated revisions by themselves, further research may investigate how peer feedback could instigate self-correction among students. This information will shed light on the factors that teachers should lay emphasis on to have effective peer feedback activities that lead to the improvement in students' writing.

4. To ensure that students of all proficiency levels equally benefit from peer feedback, researcher may consider having three students with different proficiency levels in the same group and investigate how they support one another to improve their writing, as well as require synchronous peer feedback sessions.

To this end, it is with hope that findings from this study would benefit instructors in the field of writing instruction. This research has provided evidence for using peer feedback in enhancing students' writing and promoting active learning among Thai students. The improvement of students' writing may be considered as a promising aspect of integrating online peer feedback as a supplementary activity in an English course where writing is not the only main skill focused. Future studies

could fruitfully explore this issue further by having different proficiency students in the same group and investigate how they support one another through the process of giving and receiving peer feedback.

# Appendix A

## Writing proficiency test

Test method: an essay

Topic of the test: "*Do you agree or disagree with the following statement: grades encourage students to learn. Use specific reasons and examples to support your opinion.*"

Objective of the test: to measure students' writing ability in the Experiential English course II.

Test takers: Thai undergraduate students, enrolling in the English Experiential course II.

Total of test time: 60 minutes

Directions to learners: Write a three-paragraph essay with at least 150 words on the assigned topic. You have 60 minutes to complete the test.

General description: the students were required to demonstrate their English writing ability regarding grammar, vocabulary, organisation, and idea/content while completing a task on a given topic.

Prompt attributes: a writing task on a specific topic that was related to personal views of students' own lives. Requirements for the selection of topic and task are described as follows: a topic that does not require specific or wide background knowledge of the world and a task that is meaningful, relevant, and motivating to written communication.

# Appendix B

## Analytical writing rubric

The analytical writing rubric functions as 'Assessor-oriented scales' (Weigle's, 2002) in order to guide the rating process. The rubric in this study is designed based on the writing ability that the test is intended to measure: students' abilities to use grammar, vocabulary, organisation, and idea/content.

As for the analysis, the rubric is scored on a 4-rating scale; each divided into five levels/scores to provide diagnostic information to raters. The students' scores will be calculated and shown percentages.

The rubric is illustrated below.

## Analytical writing rubric

| Criteria | 5 | 4 | 3 | 2 | 1 |
|---|---|---|---|---|---|
| **Grammar** | - Displays **a wide range** of sentence structures (simple, compound, and complex sentences).<br><br>- Uses accurate sentence structures (with subject and verb) that express complete thoughts.<br><br>- Makes few grammatical errors | - Displays **these** sentence structures (simple or compound, and/or complex sentences).<br><br>- Uses **mostly** accurate sentence structures (with subject and verb) that express complete thoughts.<br>- Make grammatical errors that do not disrupt the understanding of the text. | - Displays **one of these** sentence structures (simple, compound, and complex sentences). –<br>Maintain an **acceptable degree of** sentence accuracy that express complete thoughts.<br>- Make grammatical errors that may disrupt the understanding of the text. | - Displays a **limited** ability to form sentence structures.<br><br>- Uses **limited** sentence structures that express complete thoughts.<br><br>- Makes grammatical errors that interfere with the understanding of the text. | - Displays **fragments** and run-on sentences.<br>- Uses sentence structures that **do not** express complete thoughts.<br><br>- Makes frequent grammatical errors that impede the understanding of the text. |
| **Vocabulary** | - Uses a wide range of vocabulary.<br><br>- Displays **mastery** in word/idiom usage to | - Uses a wide range of vocabulary.<br><br>- Displays an **acceptable degree of accuracy** in word | - Uses a **sufficient** range of vocabulary.<br><br>- Displays **occasional noticeable inaccuracies** in | - Uses a **limited** range of vocabulary.<br><br>- Displays **noticeable of inaccuracies** in | - Uses a **very limited** range of vocabulary.<br><br>- Displays **frequent inaccuracies** in word |

| | | | | | |
|---|---|---|---|---|---|
| | carry out intention. | choice and idiomatic language. | word choice and idiomatic language that do not affect meaning or idea expression. | word choice and idiomatic language that may affect meaning or idea expression. | choice and idiomatic that affect meaning or idea expression. |
| **Organisation** | - Uses **correct** transitional devices.<br>- Arranges information and ideas in a logical sequence.<br>- Displays a **clear** structure and unity of thesis statement and topic sentences. | - Displays **an acceptable degree of accuracy** in using transitional devices.<br>- Arranges information and ideas in a logical sequence.<br>- Displays an **appropriate** paragraphing and unity of thesis statement and topic sentences. | - Displays **occasional noticeable of inaccuracies** in using transitional devices.<br>- Arranges information and ideas in a logical sequence.<br>- Displays paragraphing that **may lack unity** of thesis statement and topic sentences. | - Uses a **limited** range of transitional devices.<br>- Arranges information and ideas in an **illogical** sequence.<br>- There is a **lack of** clear structure and unity of thesis statement and topic sentences. | - Uses a **very limited** range of transitional devices.<br>- Arranges information and ideas in an **illogical** sequence.<br>- Displays an **inability** to write a paragraph with clear thesis statement and topic sentences. |
| **Idea/content** | - Presents **concrete** | - Presents thesis statement | - Presents thesis statement | - Presents **unclear** | - Display **no** thesis |

| | | | | | |
|---|---|---|---|---|---|
| | thesis statement and topic sentence with **smooth** and clear *logical* connections among *ideas.*<br>- **Strong** use of reasons and examples to support the writer's argument and purpose. | and topic sentence with **clear** *logical* connections among *ideas.*<br>- **Clear** use of reasons and examples to support the writer's argument and purpose. | and topic sentence with **sufficient** connections among *ideas.*<br>- **Sufficient** use of reasons and examples to support the writer's argument and purpose. | thesis statement and topic sentence with limited use of connections among *ideas.*<br>- **Limited** use of reasons and examples to support the writer's argument and purpose. | statement and/or topic sentence.<br>- **Fails** to provide reasons and examples to support the writer's argument and purpose. |

# Appendix C

## Writing Tasks

### Writing task 1: Persuasive essay

Objective: To persuade readers to adopt a certain point of view or to take a particular action

In persuasive essay, a writer introduces a topic and presents a particular point of view about a topic. To convince the reader to accept his/her viewpoint, the writer uses reasons and supporting details. Write a 4-paragraph essay in response to the following question. Have a clear thesis statement. The essay must be between 200 and 250 words in length.

*"Houses can either be multi-storey, with rooms on different floors, or stories, connected with staircases, or one-storey, with all the rooms on one floor. There are many benefits to living in a house with this particular layout." Should people live in a one-storey house?*

### Writing task 2: Problem-solution essay

Objective: To write about a topic by describing a problem and providing two solutions to the problem

In problem-solution essays, a writer presents a problem and then presents solutions to the problem. This essay is closely related to persuasive essays as the writer needs to convince readers to consider the problem and take the suggested course of action.

Write a 4-paragraph essay which provides solutions to the following problem. The essay must be between 200 and 250 words in length.

*"According to the World Health Organization 4.6 million people worldwide die each year from prolonged exposure to air pollution, making it one of the leading global risk factors for disease. It is also estimated that the number of deaths tied to air pollution will continue to rise in the coming decades."* In order to alleviate the serious problem, what solutions would you suggest?

# Appendix D

## Grid for feedback analysis

(adapted from Liu & Sadler (2003)' grid for analysing feedback)

| Feedback no. | Quality of feedback | | | Nature of feedback | | Areas of feedback | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Global | | Local | |
| | Good | Satisfactory | Unsatisfactory | Revision -oriented | Non-revision-oriented | Idea/ content | Organisation | Grammar | Vocab |
| 1 | | | | | | | | | |
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| Total | | | | | | | | | |

## The descriptors of feedback analysis rubric

| The descriptors of quality of feedback | The descriptors of area of feedback |
|---|---|
| 1. Good: correct assessment of peers' writing and some suggestions on how to improve peers' written work provided<br>2. Satisfactory: correct assessment of peers' writing and/or some suggestions on how to improve peers' written work provided<br>3. Unsatisfactory: incorrect assessment of peers' writing that leads to erroneous in peers' subsequent revision provided. No further suggestions given or questions asked.<br><br>**The descriptors of nature of feedback**<br><br>1. Revision-oriented feedback: Provided feedback such as suggestions, recommendations, and/or questions that may lead to revision in the writer's subsequent draft.<br>2. Non revision-oriented: Provided feedback such as compliments that do not lead to revision in the writer's subsequent draft. | *Global area*<br>1. Idea/content development: feedback evaluating content concentrating on sufficient support and logical development of ideas; providing suggestions on how to improve clarity of ideas/content in each paragraph<br>2. Organisation: feedback relating to logical connection of the thesis statement, and/or the use of transitions, illustrating a flow of thought between sentences and/or paragraphs.<br><br>*Local area*<br>1. Grammar: feedback relating to sentence structures, minor grammatical errors (comma and punctuation) and major grammatical errors (run-on and sentence fragments, verb form: subject-verb agreement, improper verb form, and shift in verb tense; pronoun errrors: pronoun shift and pronoun-antecedent agreement)<br>2. Vocabulary: feedback relating to word form/choice and idiom usage |

# Appendix E

## Grid for revision analysis

(adapted from (Faigley & Witte, 1981; Ting & Qian, 2010b))

| Revisions | | | Operations | | | | Types of Revision | | | | Quality of Revision | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| No. | Initiator | | | | | | Global | | Local | | Revision better | Original better | No change |
| | Self | Peer | Re-order | | | Substitution | Content | Organisation | Grammar | Vocab | | | |
| | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | |
| Total | | | | | | | | | | | | | |

## The descriptors of revision analysis rubric

<table>
<tr>
<td>The descriptors of initiator of revision<br>1. Self: changes in subsequent drafts initiated by the writer<br>2. Peer: changes in subsequent drafts initiated by feedback from peer</td>
<td>The descriptors of revision operation<br>1. Re-order: changes made on organization, e.g. reorganising original draft<br>2. Addition: changes made by adding words and/or sentences to the original draft<br>3. Deletion: changes made by removing words, sentences, and/or paragraphs<br>4. Substitution: changes made by replacing the original information with new ones</td>
</tr>
<tr>
<td>The descriptors of types of revision<br><br>Global<br>1. Idea/content development: improvement made on sufficiency and clarity of ideas/content<br>2. Organisation: improvement made on use of transitional devices and connection between thesis statement and topic sentence<br><br>Local<br>3. Grammar: improvement made on sentence structure, using subject and verb that expresses a complete thought. Vocabulary: improvement made on correct use of words and idiomatic expressions</td>
<td>The descriptors of revision quality<br>1. Revision better: the revised version is improved in the area of language and/or content<br>2. Original better: the revised version illustrates more grammar and/or vocabulary errors than in the original version. Or unclear content/organisation is shown in the revised version.<br>3. No change: there is no revision in the subsequent drafts.</td>
</tr>
</table>

# Appendix F

## Grid for interaction patterns analysis

(adapted from (Storch, 2002))

| Proficiency-pairing<br>Giver/receiver | Patterns of dyadic Interaction | | | | |
|---|---|---|---|---|---|
| | collaborative | dominant/dominant | expert/novice | Expert/passive | Dominant/passive |
| | | | | | |

## The descriptors of patterns of dyadic interaction

Based on Storch's (2002), students' patterns of interaction were categorised in relation to 'equality' and 'mutuality' during the interaction. The equality refers to 'authority over the task or activity' while the mutuality involves 'the level of engagement with each other's contribution' (Storch, 2002). In this study, the 'dominant/passive' pattern was dropped out; the 'expert/passive' pattern was added to the analysis instead because most students who provided direct suggestion in this study did not dominate the interaction, but the student writer failed to interact.



| Indexes | Collaborative | Dominant/ dominant | Expert/passive | Expert/novice | Dominant/ passive |
|---|---|---|---|---|---|
| **Equality** | moderate to high | moderate to high | moderate to low | moderate to low | moderate to low |
| **Mutuality** | moderate to | moderate | moderate to | moderate to | moderate to |

| | | | | | |
|---|---|---|---|---|---|
| | high | to low | low | high | low |
| **Description** | The reviewer & the receiver of feedback engaged with other's ideas (Storch, 2002). Both negotiated for meaning and tried to reach a solution during the interaction. | The reviewer & the receiver of feedback did not engage with each other's contribution. They could not reach consensus. | The expert reviewer provided suggestion and/or used questions. The receiver of feedback passively followed the suggestion without contribution & negotiation to the interaction. | The expert reviewer provided suggestion and/or used questions. The receiver of feedback simply acknowledged the feedback received and followed suggestion. | The dominant reviewer had total control of the interaction. The receiver of feedback passively followed the suggestion without contribution & negotiation to the interaction. |

# Appendix G

## Grid for peer-questioning analysis

(adapted from (Choi et al., 2005))

| Question no. | Patterns of peer-questioning strategy | | |
|---|---|---|---|
| | Clarification | Counter-arguments | Problem & solution |
| 1 | | | |
| | | | |
| | | | |
| Total | | | |

## The descriptors of peer-questioning

| Peer-questioning | Definitions |
|---|---|
| **Clarification** | Reviewers/writers used question to prompt further explanation of what peers have said or what is still unclear in the writing and/or feedback |
| **Counter-arguments** | Reviewers/writers used question to show disagreement with each other's opinion. |
| Problem & solution | Reviewers/writers used question to point out the problematic areas. |

# Appendix H

## An online attitude questionnaire

A 5 Likert Type scale questionnaire consists of 20 items. It is designed to be applied online with multiple-choice options that include strongly agree, agree, no opinion, disagree and strongly disagree. The objectives of questionnaire are to explore students' attitudes toward the online peer feedback and the intensive peer feedback training.

**The questionnaire items 1-10 measure students' attitudes toward the online peer feedback.**

1. Online peer feedback activity was suitable for an English integrated skills course.
   กิจกรรมการให้ข้อมูลย้อนกลับแบบออนไลน์จากเพื่อนเหมาะสมสำหรับวิชาภาษาอังกฤษแบบบูรณาการทักษะ
2. Online peer feedback improved my writing in general.
   ข้อมูลย้อนกลับแบบออนไลน์จากเพื่อนช่วยให้ฉันพัฒนาการเขียนโดยรวม
3. Online peer feedback increased interaction among classmates.
   กิจกรรมการให้ข้อมูลย้อนกลับแบบออนไลน์จากเพื่อนเพิ่มปฏิสัมพันธ์ระหว่างเพื่อนร่วมชั้นเรียน
4. Online peer feedback minimised the effect of peer pressure because I did not have to reveal my identity.
   กิจกรรมการให้ข้อมูลย้อนกลับแบบออนไลน์จากเพื่อนช่วยลดความกดดันจากเพื่อน เพราะฉันไม่ต้องเปิดเผยตัวตน
5. Online peer feedback enabled me to revise my writing.
   ข้อมูลย้อนกลับแบบออนไลน์จากเพื่อนทำให้ฉันสามารถแก้ไขงานเขียนของฉัน

6. I took time to read and reflect on my peer's online feedback.
   ฉันใช้เวลาอ่าน และ ไตร่ตรองข้อมูลย้อนกลับแบบออนไลน์ที่ได้รับจากเพื่อน
7. I trusted in my peer's online feedback.
   ฉันเชื่อมั่นในข้อมูลย้อนกลับแบบออนไลน์ที่ได้รับจากเพื่อน
8. Online peer feedback activity enabled me to give honest feedback to peer.
   กิจกรรมการให้ข้อมูลย้อนกลับแบบออนไลน์จากเพื่อนทำให้ฉันสามารถให้ข้อมูลย้อนกลับที่จริงใจแก่เพื่อนได้
9. It was easy to give and receive online feedback through an online platform.
   การให้และรับข้อมูลย้อนกลับจากเพื่อนสามารถทำได้ง่าย/สะดวกเพราะใช้ Online platform
10. The time it took from doing online peer feedback justified the benefits of the activity.
    ระยะเวลาที่ใช้ในการให้ข้อมูลย้อนกลับแบบออนไลน์จากเพื่อนคุ้มค่ากับประโยชน์ที่ได้รับจากกิจกรรมนี้

**The questionnaire items 11-20 measure students' attitudes toward the intensive peer feedback training.**



11. The intensive peer feedback training developed my skills in providing feedback.
    การฝึกอบรมแบบเข้มข้นเพื่อการให้ข้อมูลย้อนกลับแก่เพื่อนนั้นพัฒนาทักษะของฉันในการให้ข้อมูลย้อนกลับ
12. I provided useful feedback to my peer after I had been trained.
    ฉันได้ให้ข้อมูลย้อนกลับที่เป็นประโยชน์ต่อเพื่อนของฉันหลังจากที่ฉันได้ผ่านการอบรมแล้ว
13. The intensive peer feedback training developed my skills in providing useful questions for writing revision.
    การฝึกอบรมแบบเข้มข้นเพื่อการให้ข้อมูลย้อนกลับแก่เพื่อนนั้น พัฒนาทักษะของฉันในการเตรียมคำถามที่เป็นประโยชน์ต่อการแก้ไขงานเขียน

14. I provided useful questions to my peer after I had been trained.
    ฉันได้เตรียมคำถามที่เป็นประโยชน์ให้แก่เพื่อนของฉัน หลังจากที่ฉันได้ผ่านการอบรมแล้ว
15. I learned how to ask question that lead to my peer's revision after I had been trained.
    ฉันได้เรียนรู้วิธีการตั้งคำถามอันจะนำไปสู่การแก้ไขงานเขียนของเพื่อน หลังจากที่ฉันได้ผ่านการอบรมแล้ว
16. I was more confident in my ability to provide useful feedback after I had been trained.
    ฉันมั่นใจมากขึ้นในความสามารถที่จะให้ข้อมูลย้อนกลับที่มีประโยชน์ หลังจากที่ฉันได้ผ่านการอบรมแล้ว
17. I could encourage my peers to revise their written work after I had been trained.
    ฉันสามารถช่วยให้เพื่อนของฉันแก้ไขงานเขียนของพวกเขาได้ หลังจากที่ฉันได้ผ่านการอบรมแล้ว
18. I was more confident in my ability to ask useful question after I had been trained.
    ฉันมั่นใจมากขึ้นในความสามารถที่จะตั้งคำถามที่เป็นประโยชน์ หลังจากที่ฉันได้ผ่านการอบรมแล้ว
19. The intensive peer feedback training enabled me to trust my peer's feedback.
    การฝึกอบรมแบบเข้มข้นเพื่อการให้ข้อมูลย้อนกลับ ทำให้ฉันเชื่อมั่นในข้อมูลย้อนกลับที่ได้รับจากเพื่อนของฉัน
20. The intensive peer feedback training had provided me with effective strategies that I could apply to give useful feedback.
    ฉันได้เรียนรู้กลยุทธ์ที่มีประสิทธิภาพ จากการฝึกอบรมแบบเข้มข้นเพื่อการให้ข้อมูลย้อนกลับเพื่อน ซึ่งทำให้ฉันสามารถให้ข้อมูลย้อนกลับที่เป็นประโยชน์ต่อเพื่อนได้

# Appendix I

## Interview questions

1. Interview question one: how an online peer feedback, especially when giving it anonymously, impacted how you provide feedback to peer?
2. Interview question two: how did you interact with peer during an online peer feedback
3. Interview question three: What do you think about the intensive peer feedback training that we had before giving comment to your peer's writing?
4. Interview question four: What do you think about using peer feedback activity in this English integrated skills course?
5. Interview question five: What challenges did you have when providing anonymous online feedback?

# Appendix J

## Training package

### Guidance sheet for giving effective feedback

(adapted from Min 2005,2006)

| Steps | Definitions | Activities |
|---|---|---|
| 1. Clarifying writer's intentions | Reviewers prompt further explanation of what writers have said or what is still unclear in the writing. | Ask writers to express or explain their intentions in a way that is comprehensible to readers.<br>Encourage writers to clarify their ideas to bridge a communication gap, instead of leaving the readers to gauge their intentions. |
| 2. Identifying problematic areas | Reviewers find errors in the writers' work; they inform the owner of the text by pointing out the problematic areas. | Announce a problematic phrase or sentence with the aim to allowing writers to discover problematic areas in their writing.<br>Ask 'Counter-arguments' questions by expressing disagreement with the writers' ideas. (please refer to the questioning strategies in the 'Guidance Sheet for Peer Reviewers') |
| 3. Explaining the nature of the problem | Reviewers justify their reasons of why they disagree or regard what the writers have written as problematic. | Explaining why reviewers think a given term, idea, or organization is unclear or problematic and should not be used in the writing. |
| 4. Giving specific suggestions for modifications | Reviewers make suggestion to change the words, content, and organization of the writers' work. | Give directive instruction or specific suggestion on how they would change the writers' written work.<br>Encourage the writers to revise their writing by asking 'Solution-focused' questions (examples are included in the 2nd part of the 'Guidance Sheet for Peer Reviewers'). |

# Guidance sheet for peer reviewers

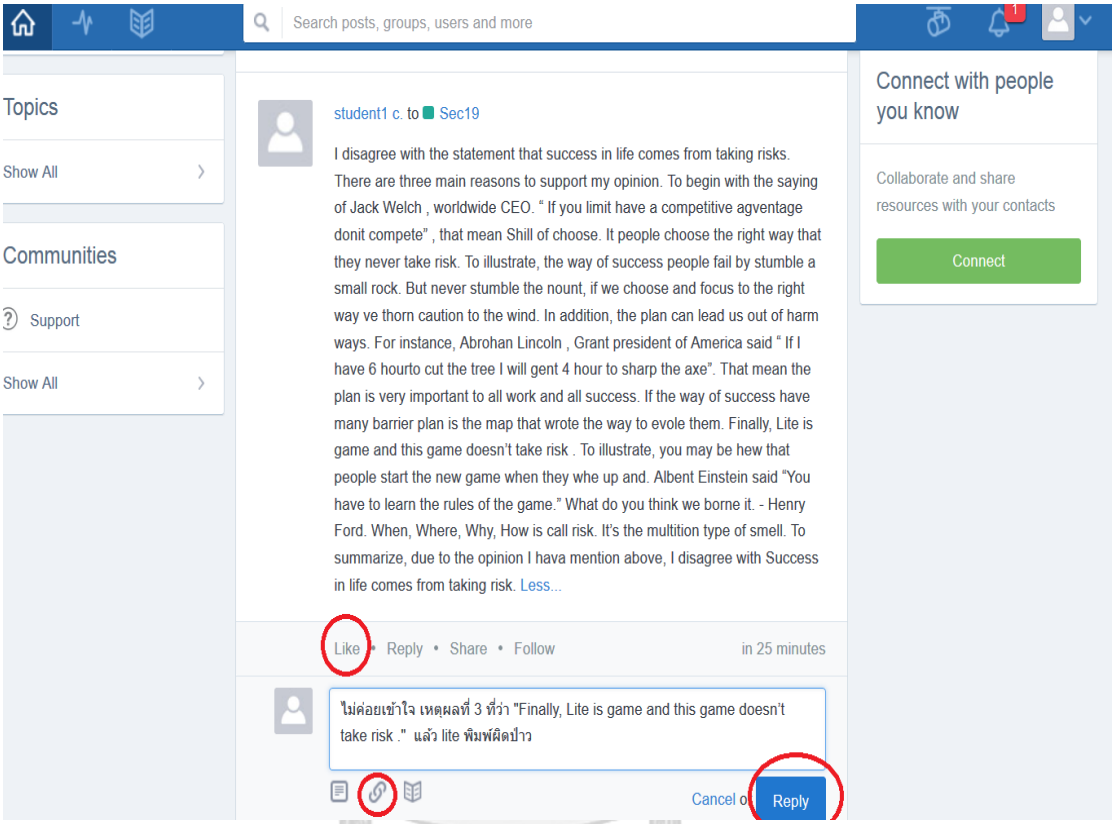
(adapted from Min 2005,2006)

<table>
<tr><th>Paragraphs</th><th colspan="2">Guiding Questions</th></tr>
<tr><td rowspan="2">Introduction</td><td colspan="2">Is there a thesis statement toward the end of the introduction?</td></tr>
<tr><td>I can find a thesis statement.<br>Answer these following questions:<br>Is the thesis statement clearly written and well-organised?<br>Does the thesis statement contain main ideas?<br>How many main ideas are there?<br>Does your peer use any transitional devices that link sentences and paragraphs together?<br>Does your peer use those transitional devices correctly?</td><td>I cannot find a thesis statement.<br>a) Remind your friend to write a thesis statement for the introductory paragraph.<br>b) Can you summarise from what you have read in the introduction and suggest a thesis statement in one sentence?</td></tr>
<tr><td rowspan="2">Paragraph II & Paragraph III</td><td colspan="2">Can you find topic sentences that contain main idea in the first few sentences of the second and the third paragraphs?</td></tr>
<tr><td>I can find a topic sentence in each paragraph.<br>Answer these following questions:<br>Is the topic sentence clearly written and well-organised?<br>Is the topic sentence relevant to the thesis statement?</td><td>I cannot find a topic sentence.<br>a) Remind your friend to write a topic sentence for this</td></tr>
</table>

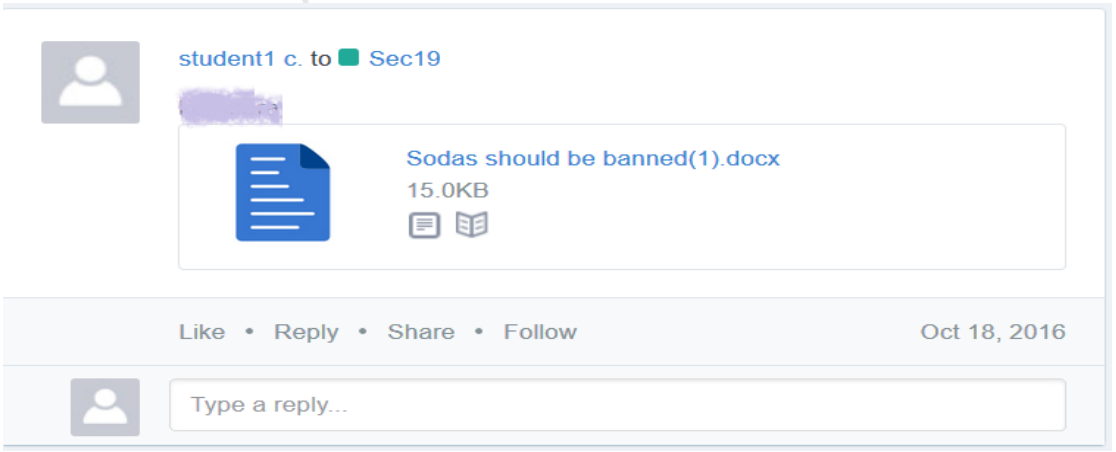
| | | |
|---|---|---|
| | Are there any supporting details for the topic sentence?<br>Are the supporting details relevant to the topic sentence?<br>Does your peer use any transitional devices that link sentences and paragraphs together?<br>Does your peer use those transitional devices correctly? | paragraph.<br>b) Can you summarise from what you have read and suggest a topic sentence? |
| Conclusion | **Is there a conclusion paragraph toward the end of this essay?** | |

# Appendix K

## Examples of Edmodo





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